

AGRICULTURE, RURAL DEVELOPMENT, FOOD
AND DRUG ADMINISTRATION, AND RELATED
AGENCIES APPROPRIATIONS FOR 2015

HEARINGS
BEFORE A
SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES
ONE HUNDRED THIRTEENTH CONGRESS
SECOND SESSION

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND
DRUG ADMINISTRATION, AND RELATED AGENCIES

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AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RE- LATED AGENCIES APPROPRIATIONS FOR 2015

WEDNESDAY, MARCH 5, 2014.

U.S. DEPARTMENT OF AGRICULTURE

WITNESSES

HON. PHYLLIS FONG, INSPECTOR GENERAL, U.S. DEPARTMENT OF AGRICULTURE

KAREN ELLIS, ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS, U.S. DEPARTMENT OF AGRICULTURE

GIL HARDEN, ASSISTANT INSPECTOR GENERAL FOR AUDIT, U.S. DEPARTMENT OF AGRICULTURE

INTRODUCTION OF WITNESSES

Mr. ADERHOLT. Okay. The subcommittee will come to order. Good morning, everybody. Welcome to the Agriculture Appropriations Subcommittee's first hearing for fiscal year 2015. I would like to approach our fiscal year 2015 bills with basically three things in mind: number one, ensuring the proper use of funds for robust oversight; second, ensuring the appropriate level of regulation to protect producers and the public; and ensuring funding is targeted to vital programs.

The audits and investigations conducted by the Office of the Inspector General are key to the subcommittee's effort to ensure the proper use of funds, to detect and reduce waste, fraud, and abuse, and to strengthen the management of USDA's agency and programs. The work is vital to us to make sure that the decisions on how to allocate the funds and our oversight work to ensure that the funding that we provide is utilized in a proper way.

This morning I am pleased to welcome USDA Inspector General Phyllis Fong, Assistant Inspector General for Investigations, Karen Ellis, and Assistant Inspector General for Audits, Gil Harden, to the hearing this morning. So welcome and thank each of you for being here.

Ms. Fong, I would like to first of all congratulate you on receiving the Distinguished Federal Leadership award from the Association of Government Accountants last month. For those of you who may not know, this recognizes Federal officials who exemplify and promote excellence in enhancing sound financial management legislation, regulations, practices, policies and systems. So we are for-

tunate to have you at USDA, Ms. Fong, and thank you for your service.

Before I begin the hearing, I do want to recognize our ranking member, Mr. Farr from California, for any opening comments that he might like to make.

Mr. FARR. Thank you very much, Mr. Chairman, and I apologize for being late. I appreciate you getting the hearing started. This is the first hearing of the year and we start with the inspector general. I have to tell you I have mixed emotions about inspector generals. I think that where you can be very constructive in improving government is great, but I have also seen a lot of unintended consequences from IG reports that have led to things getting a lot worse. Before I got into elected politics, I worked in the auditor's—in the legislative analyst's office in Sacramento under a really famous fellow who started the first state legislative analyst's office, Alan Post, and I found that oftentimes when we were analyzing the programs for the legislature, what we learned was that the programs—I mean, the legislature just didn't write good law and there—and got a lot of unintended consequences. And what I would like to—I appreciate that you are also a member of the Federal Inspectors General's Federal, what do you call it, the government-wide program where you—73 Federal inspectors. I just—when I get to questioning, I want to just discuss some of the issues of how you fix things that are broken, but I appreciate what—I echo the appreciation for the award you received. We love public servants that are recognized by their peers as outstanding, and you are certainly one of them, and thank you for being here today.

Mr. ADERHOLT. Thank you. As this is our first meeting, let me just go over a little few things about how the procedures for the hearings are to our members. And we will work under, as we always and have in the past, the 5-minute rule. Members will be recognized for 5 minutes in order of seniority at the dais at the beginning of the hearing and then in order of appearance. We will alternate between the majority and the minority members. And we may have a couple rounds to allow members to get their question in.

So I would like to ask anybody with electronic devices, if you can turn them off or put them on silent, that would be helpful.

Inspector General Fong, I will note that your written testimony will be included in the record, and I would like to recognize you now for your oral statement and then we will proceed with the questions.

OPENING STATEMENT

Ms. FONG. Thank you, Mr. Chairman, Ranking Member Farr and members of the subcommittee. I appreciate the very warm welcome that you are extending to our office today, and as always, we appreciate the interest that you show in our work and what we do at USDA.

As you know, our mission is to help USDA deliver its programs effectively and with integrity, and we provide audit and investigative services. Since you have my full written statement, let me just highlight some of the significant work we did over the last year as well as some of the work that we have in process that may be of interest.

In the area of food safety, we recently reported on swine slaughter plants, and we found that a number of plants repeatedly violated food safety regulations with little or no consequence. We also issued a report on the need for FSIS to test boxed beef for *E. coli*. That report came out a number of months ago, but we believe it is very significant.

We are currently conducting audits of FSIS's public health information system for the domestic inspection module, and we are also doing an inspection of ground turkey processing.

OIG focuses also on helping USDA safeguard and effectively deliver its programs. Given the importance of the SNAP program, it had an \$86 billion budget last year, which represents 56 percent of USDA's portfolio, we in OIG devoted more than half of our investigative resources to addressing trafficking in SNAP benefits, and this resulted in almost 400 convictions and over \$49 million in fiscal year 2013. We also spent a number of resources on our audit side to issue recommendations to the Department to better screen SNAP retailers who wish to enter the program and remain in the program.

This year, we have kicked off an initiative with FNS to work collaboratively to address SNAP fraud on a multi-agency level that will involve our State and local partners as well, and we have great expectations that this program will be proactive.

Other work that we have in process focuses on how FNS reports its SNAP payment error rates, and we are also looking at factors that are causing high average food costs in the WIC program.

Finally, as you all know, we work to help USDA improve its overall management systems. This year we issued reports on the Department's settlement of the civil rights complaints as a follow-on to the Pigford litigation. We also issued reports on IT security, financial statements and improper payments. We have ongoing work on the claims review process for women and Hispanic farmers and we also are looking at the use of Economy Act transfers and reimbursable agreements by the Department as it manages its funds.

Let me just briefly conclude my oral statement by addressing the fiscal year 2015 request for the OIG. As you all know, in response to government-wide budget constraints, we have had to streamline our operations, as has every other Federal agency, and we are presently operating at our lowest level of staffing. We want to thank you at the subcommittee for providing us with a much needed increase in fiscal year 2014. This will enable us to provide more effective oversight of USDA programs while we continue to look for cost saving opportunities within our operation.

For fiscal year 2015, the President's request provides a modest increase for us to adopt an innovative approach to addressing improper payments in USDA programs, and we hope that you are able to support that request. We are hoping to use data analytics to really focus on the level of improper payments across USDA, starting with the issues that we see in RMA and some of the other agencies.

So thank you today for inviting me to testify before the subcommittee, and we are pleased to answer any questions that you might have.

[The information follows:]

UNITED STATES DEPARTMENT OF AGRICULTURE
OFFICE OF INSPECTOR GENERAL

STATEMENT OF THE HONORABLE PHYLLIS K. FONG
INSPECTOR GENERAL

Before the

Subcommittee on Agriculture, Rural Development, Food and Drug
Administration, and Related Agencies

Committee on Appropriations

U.S. House of Representatives

March 5, 2014



For release only by the Committee on Appropriations

Good morning Chairman Aderholt, Ranking Member Farr, and Members of the Subcommittee. I am pleased to testify about the highlights of the Office of Inspector General's (OIG) recent and planned audit and investigative work, as well as OIG's fiscal year (FY) 2015 budget request.

Despite the past year being a period of restricted resources, OIG continues to achieve substantial and far-reaching results that serve American taxpayers' interest in more effective government. In FY 2013, our audit and investigative work obtained potential monetary results totaling over \$1.2 billion. We issued 54 audit reports intended to strengthen Department of Agriculture (USDA) programs and operations, which produced about \$1.1 billion in potential results. OIG investigations led to 551 convictions with potential results totaling almost \$122.7 million.¹

These monetary results far surpass our annual budget. From FY 2006 to FY 2013, the potential dollar impact of OIG audits and investigations has totaled \$8.5 billion, while our appropriations have been just \$670 million. For every dollar invested, we have realized potential cost savings and recoveries of about \$12.62. This figure does not capture the significant, but less easily quantified, results of our efforts to improve public safety or implement program improvements.

After summarizing our most significant recent audit and investigative activities under our major strategic goals, I will conclude with a description of what OIG has done over the past several years to live within its budget constraints.

Before I do so, however, I would like to address one of the broader concerns facing USDA. In our work, we often find that the Department and its agencies need to focus more on how they monitor their programs and ensure that participants are complying with requirements. As we have identified in our 2013 *Management Challenges*, many USDA agencies place their primary focus on administering programs and providing benefits—often at the cost of designing sufficient controls to ensure that program funds serve their intended purposes. This problem cuts across USDA and has emerged in agencies in all Departmental mission areas.

¹ As established by Congress in the Inspector General Act of 1978, audit monetary impacts derive from funds put to better use and questioned/unsupported costs. Investigation monetary impacts come from recoveries, court-ordered fines, restitutions, administrative penalties, as well as other judgments.

While individual audits and investigations may bring to the fore problems specific to particular agencies and programs, USDA needs to prioritize compliance and monitoring as vital elements of proper program management. In this vein, OIG is evaluating the Farm Service Agency's compliance activities; a related project involves reviewing the Risk Management Agency's (RMA) national performance reviews and determining how useful they are in ensuring program compliance.

Goal 1—Safety and Security—Strengthen USDA's ability to implement safety and security measures to protect the public health as well as agricultural and Departmental resources

To help USDA and the American people meet critical challenges in safety, security, and public health, OIG provides independent audits and investigations. Our work addresses such issues as the ongoing challenges of agricultural inspection activities, the safety of the food supply, and homeland security.

Investigation Leads to Judgment Against California Meat Packing Plant

In June 2012, two defendants entered into a settlement agreement to pay the United States over \$304,000 and pay the Humane Society of the United States (HSUS) over \$19,000. In October 2013, six defendants, including individuals and companies, entered into a settlement agreement to pay the United States approximately \$2.7 million and pay HSUS approximately \$112,000. In addition, one of the companies entered into a consent judgment in favor of the United States Government in the amount of \$155 million. The settlements resulted from a *qui tam* civil complaint filed by HSUS in February 2008 against the company and its entities; the complaint prompted an investigation by OIG and the U.S. Attorney's Office for the Central District of California into allegations that a California company mistreated cattle destined for slaughter and adulterated meat, including some products distributed to the National School Lunch Program.

The Food Safety Inspection Service (FSIS) Needs to Ensure that Swine Slaughter Plants Follow the Federal Meat Inspection Act

FSIS inspects over 600 plants that slaughter swine, and our audit of plants subject to FSIS' enforcement found that the agency's actions do not deter swine slaughter plants from becoming repeat violators of the Federal Meat Inspection Act. As a result, plants have repeatedly violated

the same regulations with little or no consequence. We found that, in 8 of the 30 plants we visited, inspectors did not always examine the internal organs of carcasses in accordance with FSIS inspection requirements, or take enforcement actions against plants that violated food safety regulations. As a result, there is reduced assurance that FSIS inspectors effectively identified pork that should not enter the food supply. Agency officials concurred with our recommendations.

The Agricultural Marketing Service (AMS) Needs to Ensure That Organic Dairy Cattle Have Appropriate Access to Pasture

OIG also conducted an audit of how AMS implemented the “access to pasture” rule as part of its National Organic Program (NOP). While the agency has generally implemented this rule successfully, we noted that NOP officials had not clearly defined how producers should demarcate herds of organic milk-producing cattle, which meant that some certifying agents treated organic dairy producers differently, allowing some to add cattle to organic dairy herds, when other agents would not. Because the regulations are not clear in defining herds of organic cattle, consumers may not always be receiving the high quality organic product they expect. We also noted that NOP needs to include organic feed brokers within the NOP certification process to ensure that organic feed is not commingled or contaminated. Finally, we found that smaller operations were often unaware of recordkeeping requirements of the access to pasture rule regarding livestock confinement, grazing, or the cattle’s dry matter intake. AMS concurred with our recommendations.

Among other audits in process, OIG is evaluating how FSIS has implemented the Public Health Information System for Domestic Inspection (PHIS), and whether PHIS adequately addresses the agency’s key mission elements.

Goal 2—Integrity of Benefits—Reduce program vulnerabilities and strengthen program integrity

One of OIG’s most important goals is helping USDA safeguard its programs to ensure that benefits are reaching those they are intended to reach. Given the importance of the Food and Nutrition Service’s (FNS) Supplemental Nutrition Assistance Program (SNAP)—its \$86 billion

in FY 2013 represents 56 percent of USDA's budget—OIG continues to direct a large percentage of its resources to combatting the trafficking of SNAP benefits. In 2013, OIG's combined audit and investigative work was selected for a Council of the Inspectors General on Integrity and Efficiency award for excellence. The award cited audit findings and criminal prosecutions resulting in more than \$84 million in questioned costs, funds to be put to better use, restitutions, seizures, and other means, as well as FNS' agreement to 58 of OIG's recommended program improvements.

As a recent example of our investigative SNAP work, an employee of a Philadelphia supermarket who trafficked in SNAP benefits was sentenced to prison time, and was ordered to pay approximately \$2.3 million in restitution. In California, a husband and wife who owned six stores that engaged in SNAP trafficking were sentenced to 40 months and 18 months in prison, respectively. They were also ordered to share in paying \$6.5 million in restitution to FNS.

Working jointly with FNS, OIG has also developed a new approach, called the SNAP Initiative, which is a tool for further identifying and addressing fraud in SNAP on a multi-agency level. The initiative combines the resources, ingenuity, and prosecutorial efforts of local, State, and Federal law enforcement partners with the common goal of preventing and prosecuting SNAP fraud. This multi-step approach encourages guidance and identification of SNAP fraud offenders on both the retailer and recipient side of trafficking. A vital aspect of the initiative is prevention, to be achieved through community outreach and media efforts educating citizens and retail owners on Federal regulations concerning SNAP benefits. OIG is in the process of rolling out this promising initiative with FNS in 2014.

FNS Needs to More Closely Screen SNAP Retailers

Likewise, OIG audits have shown how SNAP may be improved to better serve its intended purpose. Recently, OIG reviewed how FNS authorizes retailers to participate in SNAP to determine if disqualified retailers were allowed to continue participating in the program. We found that FNS does not have clear procedures and guidance to carry out key oversight and enforcement activities to address SNAP retailer fraud, or adequate authority to prevent multiple instances of fraud—either by a particular owner or within a particular location. As a result, FNS does not consistently penalize retailers who illegally exchange SNAP benefits. From a sample of

316 locations, we found that FNS did not properly determine potentially \$6.7 million in penalties, and authorized 51 ineligible store owners, who redeemed over \$5.3 million in benefits since 2006. In addition, we identified 586 owners allowed to continue participating in SNAP at other locations after being permanently disqualified, and 90 retail locations that had two or more firms permanently disqualified. FNS and OIG agreed on 12 of 20 recommendations; however, further action from the agency is needed before management decision can be reached for the other 8 recommendations.

OIG also has several upcoming projects that will address food benefits. We are currently reviewing the National School Lunch/Breakfast Program to evaluate the methods FNS is using to lower the improper payment error rates for both programs. In a separate project, we are determining whether FNS and the State agencies responsible for administering SNAP have adequate controls in place to ensure that SNAP payment error rates are accurately determined and reported, appropriate actions are taken to reduce the error rates, and errors are timely corrected when detected. Finally, in a third review, we are evaluating the factors causing high average food costs reported for States participating in the Special Supplemental Nutrition Program for Women, Infants, and Children.

RMA Needs to Ensure That its Prevented Planting Provisions Do Not Discourage Farmers from Planting Crops

With approximately \$4.6 billion in claims paid to producers who were prevented from planting from 2008 to 2011, RMA's prevented planting provisions offer another opportunity for USDA to achieve improved efficiency. OIG determined that RMA needs to improve the prevented planting provisions to be more cost effective; to encourage producers to plant a crop, where possible; and to make eligibility criteria more objective and clear. Specifically, we found that, out of concern for covering a producer's pre-planting costs in all cases, RMA set current prevented planting coverage levels above the percentages of guarantees that farmers needed to cover average pre-planting costs. As a result, by establishing coverage levels that provided over \$480 million in potentially excessive payments, we believe that RMA inadvertently provided incentives to actively encourage prevented planting claims. Also, we found that loss adjusters did not fully document and support eligibility for over \$43 million in prevented planting

payments. RMA needs to improve its guidance to better hold approved insurance providers accountable, and prevent acres that are regularly too wet for crop production from receiving prevented planting coverage. The agency generally agreed with our recommendations.

Also in the area of farm-related programs, in December 2013, OIG concluded an investigation into a multi-year scheme to circumvent farm program payment limitations. As a result, three producers, collectively with several of their corporations and limited partnerships, signed a settlement agreement in which they repaid \$5.4 million to the Government. Our investigation revealed that the three men (the principal owner of an Illinois farm, his son, and son-in-law) created limited partnerships with other individuals who did not have the financial means or ability to operate farming operations that would qualify for the program. During crop years 2001-2008, the three men participated in at least 17 limited partnerships for which they maintained full control and signature authority as general partners, even though, on paper, they held only a 2 percent or 4 percent share of each. The 17 limited partnerships received farm program payments of approximately \$6.7 million.

Goal 3—Management Improvement Initiatives—Support USDA in implementing its management improvement initiatives

OIG works to aid the Department in improving the processes and systems it needs to function effectively. Notably, we have recently issued several reports intended to improve how USDA settles civil rights complaints and promotes foreign trade.

Efforts to Monitor Settlement of Civil Right Complaints

USDA continues its work concerning complaints filed by different civil rights groups. In response to requirements of the Claims Resolution Act of 2010,² OIG performed an audit of the *In re* Black Farmers Discrimination Litigation (known as *BFDL*) claims process. Our statistical sample of 100 randomly selected claims found instances where the arbiter had reached differing conclusions for claims that were essentially identical, allowed multiple claims for the same farmer, and approved ineligible claims. The arbiter and the claims administrator agreed with our concerns and took action to correct these issues and maintain the integrity of the process.

² Pub. L. No. 111-291, 124 Stat. 3064.

OIG is currently performing a review, at the Secretary's request, intended to determine if the claims review process for women and Hispanic farmers is adequate and functioning. OIG is also performing additional audit work on the adjudicated *BFDL* claims to determine if awards were granted to eligible claimants.

The Office of Advocacy and Outreach (OAO) Needs to Improve its Process for Selecting Outreach Candidates

OAO initially selected applicants to receive FY 2012 grants through the Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers Program, even though these applicants may not have been the most meritorious and deserving candidates. OAO officials disregarded regulatory requirements and guidelines cited in the Funding Opportunity Announcement in making those selections. Also, they had no documentation to support their decisions and could not explain why some applicants that appeared more deserving were not selected to receive grant funds. OAO agreed with our recommendation to strengthen the selection process and re-selected applicants in a more impartial and transparent manner.

The Foreign Agricultural Service (FAS) Should Improve its Strategic Plan for Increasing Trade

A recent audit determined whether USDA and FAS have developed and implemented measurable strategies that are effectively promoting trade. We found that, although FAS recently updated its strategic plan to include measurable goals and objectives, these goals and objectives (which measure the dollar value of exports) do not present the whole picture of how FAS' actions are affecting the global market for American agricultural goods. FAS' measures are not outcome-based and do not show how the United States is performing in a given market compared to its competitors. OIG acknowledges that developing outcome-based performance measures for FAS' trade efforts is difficult, but we maintain that a change in U.S. market share is an outcome-based measure that would be of great use to policymakers. FAS generally agreed with our recommendations.

FAS Needs to Improve Controls Over Agricultural Aid to Afghanistan

After the U.S. Agency for International Development transferred \$86.3 million to USDA for capacity-building activities in Afghanistan in 2010, OIG was required to monitor how these

funds were used. A recent review found that senior managers at FAS were aware of general control weaknesses before first receiving the funding; nevertheless, FAS had not implemented performance monitoring plans for all projects until over 2 years after the first project began. Without adequate management controls in place, FAS cannot effectively monitor these projects and faces difficulty in providing adequate assurance that the funds are effectively accomplishing program goals. FAS agreed with all recommendations.

USDA Continues its Efforts to Improve the Reporting of Improper Payments and High Dollar Overpayments

OIG continues to aid the Department in its efforts to reduce improper payments as part of the Improper Payments Elimination and Recovery Act of 2010 (IPERA).³ In our annual report on this topic, we found that USDA did not fully comply with IPERA for a second consecutive year. Although USDA made progress in improving its processes to substantially comply with IPERA, the Department was not compliant with several IPERA requirements. By taking more effective measures to avoid these noncompliances, USDA could have avoided approximately \$74 million in improper payments by meeting reduction targets.

USDA has improved in its efforts to report high dollar overpayments, according to our annual report. OIG found that USDA reported more comprehensive information about high dollar overpayments than it did in previous years. Specifically, due to improved reporting oversight and processes, USDA reported 239 overpayments, totaling approximately \$20.3 million in FY 2012. This represents an increase of 67 percent over the number of overpayments reported the previous year. However, we determined that the quarterly reports included errors and were published up to 102 days after the due date. Without accurate and timely reporting, the effects of USDA's actions or strategies to eliminate the errors causing high dollar overpayments are not fully known. USDA's Office of the Chief Financial Officer agreed with our recommendation.

³ Pub. L. No. 111-204, 124 Stat. 2224.

The National Agricultural Statistics Service (NASS) Must Improve How It Releases Sensitive Information

OIG has also recently audited how NASS controls access to sensitive market data and whether information is being released according to established criteria. We found that NASS did not adequately enforce critical procedures and physical security measures meant to protect the security of NASS information. Notably, OIG was able to bring a cell phone into lockup and witnessed a reporter using an iPad during lockup, although these items are banned from NASS' facility. As a result, sensitive information could be compromised or leaked before its official release, which could adversely affect equitable trading in commodity markets. We concurred with the actions NASS has taken to address 14 of the 17 recommendations made in the report.

OIG conducts investigations of USDA employees alleged to have engaged in criminal activity. In November 2012, an official with Rural Development pled guilty to committing wire fraud by depositing \$6.2 million in checks, issued by 10 water authorities and one electric authority, into a bank account for which he had the sole signatory authority. A joint investigation with the Federal Bureau of Investigation disclosed that the employee then transferred those funds to his personal accounts. The employee separated from Federal employment in January 2013. In March 2013, the employee was sentenced in U.S. District Court, Middle District of Alabama, to 60 months in prison. In June 2013, the man was ordered to pay \$3.9 million in restitution to seven water authorities and one electric authority.

In other upcoming work that may be of interest to the Subcommittee, OIG is performing, at Congressional request, a review to determine the adequacy of USDA's management controls over the Department's Economy Act transfers and the collection and use of funds under Department-wide reimbursable agreements, commonly referred to as "greenbook" charges. Additionally, OIG is reviewing FAS' controls over private voluntary organizations, as well as developing a "lessons learned" report concerning our Recovery Act oversight.

OIG Cost-Saving Initiatives

In response to the budgetary constraints throughout the Federal government, OIG has streamlined its operations to create a leaner, more effective agency. In FY 2012, we conducted a

functional analysis to ensure that OIG, as an agency, is appropriately positioned to continue to operate in the most efficient and effective manner. Based on this analysis and the limited FY 2013 budget, we took the following steps:

- reduced staffing through attrition;
- reduced leased office space and office structures;
- increased use of webinars, video, and teleconferencing to reduce travel costs;
- allowed employees to fill GS-14 and GS-15 positions without moving, which has reduced relocation costs; and
- shifted Investigations and Audit employees away from headquarters and to the field to carry out OIG's audit and investigative operations more effectively.

These steps enabled OIG to continue performing its oversight role despite the restricted budget.

Although OIG is presently functioning at its lowest level of staffing in its history, the increase in OIG's FY 2014 budget will allow us to provide more effective oversight of USDA programs.

We thank the Subcommittee for providing these much needed resources. While we will continue to look for cost-saving opportunities, this year we will be able to fill some critical vacancies that will enhance our ability to deliver high quality products. We will also maintain and grow our employee expertise by providing mandatory training and development. Our FY 2015 budget request continues that trend by focusing resources on programs within the Department that are considered high-risk, and developing an innovative approach to enhance our audit planning and execution.

Thank you for inviting me to testify before the Subcommittee. I would be pleased to address any questions you may have about our work.

DEPARTMENTAL CHALLENGES

Mr. ADERHOLT. Thank you, Inspector. First of all, I would like to start out with something that I believe I had mentioned last year when we started out the subcommittee hearings, and that was talking about the challenges and the successes. You have mentioned some of those in your opening statement, but I think last year I asked about the USDA's greatest challenges and whether the Department is doing enough to address those challenges. And can you tell a little bit about what you see from your perspective and from your office, what is the greatest challenges as you look to the year ahead?

Ms. FONG. Well, that is a very good question, and it gives us a chance to look at the body of our work and see the major themes coming out.

As we were preparing for this hearing, we were talking, and one of the things that we see across the Department is that there is a need to provide more attention to effective management of the Department's programs and oversight of programs both within the agencies and with respect to third-party providers of benefits. We have done a number of reports in the agencies. I think if you look at our IT security reports, that is an indication of some of the problems that we are seeing with agencies who need to really focus on their IT security. Improper payments becomes a symptom of perhaps the need for more effective oversight of how agencies deliver programs. And what we were seeing is that in this era of budget constraints, program managers are looking as a top priority to deliver programs, to get the money out, to get the benefits out to recipients and participants, and we believe that that is a very important goal.

When an agency has perhaps less resources than it has had in the past, sometimes agencies have to make some tough choices about delivering benefits versus making sure that there are enough controls in place, that there is enough oversight of how those benefits are delivered, and we believe that there needs to be a little more attention on the oversight side of that. We see that in the SNAP program, in the nutrition programs, in the crop insurance programs, in the farm programs. And as our statement points out, we are doing continued work on those oversight efforts by the agencies to see how effectively those programs are working.

Mr. ADERHOLT. Where is USDA—in what areas are they doing a good job in tackling the waste, fraud, and abuse?

Ms. FONG. Well, we are very encouraged by the partnership that we have with FNS. We recognize that the SNAP program poses a number of challenges for everyone at the Federal, State and local levels in terms of delivery, but FNS has been very willing and enthusiastic in terms of working with us to roll out our initiative this year. And let me just talk a little bit about that. We are partnering with them to work with State and local administrative agencies as well as law enforcement to really get at some of the root causes for vulnerabilities and fraud in the program, and to ensure that fraud where we find it is being addressed both at the retailer as well as the local recipient level, and to also proactively get the message out to people around the country that if they engage in fraudulent ac-

tivities, that there will be some consequences to that. So we are rolling that initiative out as we speak, and FNS has been a very, very active partner.

PROGRAM OVERSIGHT

Mr. ADERHOLT. You mentioned about the oversight of programs and how important that is. I assume that is going to be one of your top recommendations for USDA. What are some other recommendations that would be near the top there that would fall in that same category?

Ms. FONG. We feel very strongly that the Department needs to focus on its IT security initiatives. I think there is a recognition at the Department that this is a significant issue. The use of IT cuts across all program areas. As we are becoming more computerized, it is essential that we have good databases and security of data. I think there is a good recognition of the problem. The solutions are taking time, and they will continue to require time and attention.

Mr. ADERHOLT. Okay. Thank you. Mr. Farr.

Mr. FARR. Thank you very much, Mr. Chairman.

IG WORK PROCESS

I would like to pursue a little bit of just the process in which the IG's work, because you are on the council of—you are chair, aren't you, of the Council on Integrity and Efficiency? Congratulations. That is—you are in charge of what, 73 other inspector generals?

Let's take the SNAP question that the chairman asked. I mean, that seems to me, and just quickly thinking, that there is probably no program in the Federal Government that has more responsibilities to audit the recipient of the money, of the benefit, and then how that benefit is spent. In most cases, it is just does the money get to the right place, not how is the money from the person spent. Nobody checks how Social Security money is spent, but they do check on how SNAP programs are spent.

So as you review these, and obviously, as you said, it is a huge program. It is, what, 56 percent of the entire Department of Agriculture's budget spent on food in America? Do you also come in with recommendations on how to improve the program or just that it isn't—because I have found in a lot of these programs, like the school feeding program that I am really interested in, we had seven or eight different programs within schools. Nobody's come in and said why don't we put those under one title and manage them under one silo rather than seven separate silos, and whatever technology, because you are also reviewing use of technology, appropriate technology, sort of bar coding of the meals or bar coding the process.

I mean, there is just—do those recommendations, do the IG's come in and say there is a better way of managing this law that we are required to have you comply with?

Ms. FONG. You have raised a number of very interesting thoughts in your question. Let me just comment on a number of them. You mentioned the Council of the Inspectors General on Integrity and Efficiency. It is composed of the 73 Federal IG's. And our task, our mission is to identify issues that cut across multiple

agencies and then to do cross-cutting work and come up with recommendations where appropriate. As you mentioned—

Mr. FARR. Is that—excuse me. Is that also program change or just how the IG's can better function?

Ms. FONG. It is both. We do focus on how IG's can better function. We also look at program change. For example, we have issued reports in the last few years on suspension and debarment government-wide, on IT cyber security and how to better evaluate that, and we have done something on export and import trade. And one of the projects we are working on now deals with cloud security, the security of the agencies using cloud computing to manage a lot of their IT practices.

As you can imagine, it is not always easy to find topics that cut across department and agency lines. For example, you know, you mentioned that on the Social Security side that perhaps people do not look at how Social Security recipients spend their money. I would say—

Mr. FARR. Well, there is no law—there is no law into that of how you spend it, where there is with SNAP, you are limited as to how you can spend the money.

Ms. FONG [continuing]. And along those lines—

Mr. FARR [continuing]. The benefit.

Ms. FONG. At the IG level, at the IG council level government-wide, what we would focus on in dealing with the IG's from, say, the Social Security Administration or, say, the Department of Health and Human Services with respect to Medicaid, or Veterans Affairs with respect to veterans benefits, is to find issues that we have in common, for example, the need to match databases, not to pay people who are on the death master list or who may be ineligible for other reasons, and we have been able to do work at that kind of macro level.

Mr. FARR. Does that come back to—I mean, here all of us are elected to fix things that are broken in government, and some of us think sometimes that it is broken on the collection side and some of us think it is broken on the expenditure side. I mean, that is the politics. But it seems to me that you are—the thing I see in Congress different from when I was in local and State government is that we do everything on a very general level. We make law very general and then we have these rule writings that gets into writing the detail, but the only people that really examine and know how it really ends up on the street are people like inspector generals and/or managers of those programs, and very rarely do we get back sort of the feedback, you designed this thing poorly. It is just—it is not going to work the way you have written it. There is a smarter, better way. That is what—the kind of feedback, you know, and nobody knows that except the technicians on the inside. I always tell everybody who is a public employee, tell us what is broken. If you are running a program and you have to do a bunch of dumb-dumb stuff, we want to know dumb-dumb, because we can fix dumb-dumb, but we don't get it. I mean, we don't always get it unless there is sort of a scandal or something like that.

And I just wondered if part of your responsibilities was to come back and say, you know what, either the law or the regs are just poorly written.

Ms. FONG. And that is a very good point. We do try to point that out in our reports where we think that a regulation or a law should be looked at and perhaps revised. The one that comes to mind immediately is our recent report on SNAP retailers and how the Department authorizes and reauthorizes retailers who participate. There are a number of recommendations we made in there that may require a change to law or regulation if the Department decides it wants to pursue that, and so I would draw your staff's attention to some of those recommendations.

Mr. FARR. Thank you.

Mr. ADERHOLT. Mr. Latham.

Mr. LATHAM. Thank you, Mr. Chairman.

NASS DATA

And welcome; appreciate your work. Your testimony reported a lack of antiquated enforcement procedures and security measures meant to protect the National Agricultural Statistic Service information and understanding how important security is on that information, the effects it can have on markets and insider trading, whatever that—it is a little concerning to me to hear that there are real problems.

Was there any data that was actually released prior to what it should have been, or do you know if information did get out ahead of—to affect the market?

Mr. HARDEN. Yes, sir. We would probably have to get back with you on details, but before we did our review, I think a couple years prior, there was some information that was released a couple minutes ahead of time, but the impact on that, I don't know the exact impact that it had on the market.

[The information follows:]

That is correct. Both the NASS report and the press articles are intended to be released simultaneously so that the public and the press readers have the same market information at the same time. In 2011, three incidents involved the early release of press articles. Other times, NASS reports appeared on its official website after the official release time, due to connectivity issues.

While we have no evidence that early releases actually did affect the market, the reports that NASS publishes are extremely market-sensitive and contain major principal economic indicators of the United States economy. For instance, NASS provides statistical data that are included in the *World Agricultural Supply and Demand Estimates (WASDE) Report*. An Economic Research Service (ERS) economist found when the WASDE report is released, it is "followed by an immediate reaction reflected in the opening future prices for each commodity."¹ The ERS report provided anecdotal evidence that a spike in price volatility occurs the instant the WASDE report is released to the public. This brief period of high volatility can affect risk management strategies, creating an environment where a very short delay in accessing information may have a large impact on traders.

During our audit fieldwork, we found that data dissemination problems continued to occur in lockup, albeit under different circumstances, indicating that other solutions needed to be sought. During the March 2013 lockup session, we identified a delay of 4 minutes in the release of a report to the public, due to information technology connectivity issues. After additional discussions with NASS, we discovered that this has been, and remains, an ongoing issue; some reports have not been uploaded timely to NASS' website. We observed that data from news organizations were not delayed, allowing anyone who subscribes to their services to have access to the report information before others checking NASS' website, resulting in inequality among users of NASS information. Since markets can have an immediate reaction to the reports, this reinforces the need for action by NASS to ensure that both the NASS report and the press articles are released simultaneously so that the public and the press readers have the same market information at the same time.

We recommended that NASS immediately take action to prevent report release delays. As part of the process to eliminate the delays, NASS should develop a long-term plan that includes specific deadlines and then implement the solution to prevent delays or early releases. NASS agreed with this recommendation and stated it has taken and will continue to take action to minimize report release delays and is currently working on a plan.

¹ *Quantifying the WASDE Announcement Effect*, Michael K. Adjemian, Oxford University Press, 2012.

Mr. LATHAM. Okay. Are you confident now that the information is secure, that the data's not—

Mr. HARDEN. I know that as we did the review and we brought the problems to NASS, they were very receptive and started working on fixing the problems before the field work was even finished. So in terms of the recognition of the problem, I think they have a better handle on it now. We would have to go back and look at it in the future to see if the fix is sufficiently implemented.

Mr. LATHAM. Do you have any additional recommendations or any other concerns or—other than what you have already—

Mr. HARDEN. No.

RECOVERY RECOMMENDATIONS

Mr. LATHAM. Okay. There were—I think in your testimony, you did 17 audits, and as a result, determined there was \$424 million of “questioned” or unsupported costs at USDA, and there was \$12 million that was recommended for recovery and \$412 not. Why would you not want to recover more than \$12 million rather than the \$412?

Ms. FONG. Let me just talk generally in terms of our recommendations. We—as you point out, we make dollar recommendations in a number of categories, and that cost avoidance category generally applies when we are making recommendations to the agency to take action before the money goes out. Don't let the money go out to an ineligible person. The recovery category is when the money has already gone out and we tell the agency, take a look at this, we think it may have gone, and they may be using it for an ineligible purpose or an improper purpose. We will make those recommendations.

At that point, the agency then has to assess whether they can take action, whether it is within the statute of limitations, whether they have a likelihood of recovery, whether there is any other factor that comes into play there. And so we work with the agency to come up with recommendations that are possible and implementable.

Gil, did you want to add—

Mr. HARDEN. And just to point out, a big part of the number that was not recommended for recovery, I think if I go back and look at the details, they are going to be connected with statistical projections. So on the—we take a sample and we do it statistically. If there are individual members of that sample where we note that they were potentially ineligible, we can make specific recommendations to the agency to go look at those specific sample items, but then with our statistician, we can take that data and apply it to the universe that we were looking at at that point in time, which comes up with an amount that is potentially ineligible, but it is something that is not recoverable because it is not connected with a specific sample item.

Mr. LATHAM. So these numbers are actually projections of maybe?

Mr. HARDEN. Statistically, yes, those.

Mr. LATHAM. Okay. Again, define your question, unsupported costs. What does that mean?

Mr. HARDEN. The unsupported costs category is where they did not have the documentary support for whatever—

Mr. LATHAM. Okay.

Mr. HARDEN [continuing]. The decision was that was made, and they couldn't provide it to us during field work or maybe they were able to provide it to us after, they were able to come up with it, or if not, then it stays as unsupported. It is part of the question cost category.

Ms. FONG. For example, if the Department were to give a grant to a recipient to carry out a certain kind of activity, and the recipient then claimed costs under the grant, say, for salaries or for purchase of equipment or whatever it is, if they don't have the supporting receipts or documentation, then the Department should not be paying that. The claimed costs need to be supported and justified.

Mr. LATHAM. Okay. I am out of time. Thank you.

Mr. ADERHOLT. Ms. Pingree.

Ms. PINGREE. Thank you very much, Mr. Chair.

Thank you for your testimony and all of the work you do on behalf of the USDA and investigating things that really need to be understood.

INVESTIGATION PRIORITIES

Let me just start with some of the questions around how you decide where to focus your investigations. You did a great job in the beginning, I think, explaining that because SNAP is such a large percentage of the budget at USDA, it has been a focus, and you have certainly done a lot of work of trying to sort out what the areas are of fraud. It is always a volatile topic here when it comes to the policy and the funding. And I appreciate the fact that you have really started to look at some of the retailing issues as opposed to just focusing on individuals, because I think all too often we think about the individual who committed the fraud.

So I want to just get a little bit of a comparison. I see from 2012 data, about 50 percent of your investigations went into SNAP fraud. My understanding is about 99 percent of the people eligible for SNAP are completely truly eligible, so clearly, some of this is happening in the retailing side. Payment accuracy is 96.2 percent from 2011 data.

In Maine, where I represent, the average SNAP benefit is about \$122 a month, so individuals who do something incorrect aren't necessarily defrauding the government for high numbers.

I, of course, want to compare this a little bit to some of the farmers who receive different kinds of payments through USDA. And the average of the top 10 percent of farmers is \$32,000 a year in crop subsidies. So just give me a sense on how much you have done on that side, given the dollar value, how able we are to understand when people are receiving those subsidies appropriately, and how you balance out the use of those resources, and I would say particularly in light of the fact that with this passage of the farm bill, there are going to be a tremendous number of changes in how farmers receive subsidies, so it seems to me it will be an area of a certain amount of confusion in the beginning.

Ms. FONG. Let me just comment generally about how we set our priorities for our work. As you mentioned, on our investigative side, which makes up about 40 percent of the resources of our office, SNAP has taken up more than half of our attention. And we generally focus on the retailers, because that is the Federal level of responsibility, leaving the recipient fraud generally to the State and locals to investigate.

Now, both our audit side of the house and our investigative side of the house, every year we look at the areas of highest risk within USDA as we plan our work. And in order to kind of assess that, we ask for input from Congress, from the Secretary as to areas where you all might believe we could focus our attention. We also look at the history of the various programs in the portfolios based on our experience, the level of funding, whether there are new legislative initiatives that are being implemented, and any other factor that could come into play. We then decide what areas pose the greatest risk at the current time, and are ripe for a look. Many times we will not look at a very new program, because we want to give the agency a chance to start implementing it.

I think if you look at our full portfolio, you will see that every year we are mandated by law to carry out financial statement audits, which we do of the whole Department. We have to look at IT security. We have to look at improper payments by law, and so we spend quite a bit of resources on that. We have also spent a lot of time on the conservation programs because of the way those programs have been managed in the past. Crop insurance is a matter of great interest to us, as is any food safety issue. That tends to be one of our top priorities.

IMPROPER PAYMENTS

Ms. PINGREE. So perhaps I could have the opportunity to do a little more research on this or you could provide me with that, but I am curious, given some of the priorities around improper payments and what would be quite a bit of changes in crop insurance. So, again, I am somewhat interested in how many improper payments or how that is evaluated when it comes to subsidies to farmers. And you may not have all that information today, but I would be just generally interested in understanding better how well we are able to investigate that and how much of your resources go to that investigation.

And just as a little follow-up on that, so I know that part of the new resources that are in the President's budget are on the creation of these audit centers of excellence, which seems like a potentially good way of going about doing that, so again, in the future, do you have an understanding of how much of that will be devoted to investigating SNAP fraud as opposed to investigating subsidy payments?

Ms. FONG. We would be happy to provide some additional detail for the record.

Ms. PINGREE. I am out of time, so I know you probably don't have a lengthy answer, but I would be happy to get more information on that.

Ms. FONG. We would be happy to provide that.

Ms. PINGREE. Great. Thanks.

[The information follows:]

Since FY 2010, we have been spending approximately 14 to 20 percent of our investigative time and resources investigating fraud and mismanagement involving Farm Service Agency (FSA) and Risk Management Agency (RMA) programs. Most of our investigations involve allegations of fraud on the part of program applicants and participants, including false claims on FSA loan applications, conversion of collateral that secures FSA direct and guaranteed loans, establishment of sham farming operations on paper in order to receive more benefits than allowed under payment limitation rules, hiding of crop production in order to file false crop insurance claims, and other kinds of illegal activity involving improper crop insurance and farm subsidy benefits. The chart below provides further information on investigative resources spent on FSA and RMA programs by Fiscal Year.

Percentage of Time Dedicated to FSA and RMA Investigations FYs 2010 through 2014

	%FSA	%RMA	Total% Combined FSA/RMA
FY 2010	13.86%	6.10	19.96%
FY 2011	9.87	5.23	15.10
FY 2012	9.96	4.55	14.51
FY 2013	9.85	5.24	15.09
FY 2014 (to date)	9.08	5.14	14.22

Mr. ADERHOLT. Mr. Nunnelee.

Mr. NUNNELEE. Thank you, Mr. Chairman.

IPERA

Ms. Fong, you state in your report that the USDA has not complied with the Improper Payments Elimination Recovery Act of 2010. What areas is the USDA lacking full compliance with IPERA?

Ms. FONG. Well, there are seven areas that we are supposed to assess, and they are non-compliant with three of them. They have not——

Gil, go ahead to make sure we get it right.

Mr. HARDEN. The three areas that they were not compliant—we found issues with eight of the 16 high-risk programs.

Mr. NUNNELEE. Eight of the 16 what?

Mr. HARDEN. High-risk programs that are covered as part of IPERA. So for two programs, they have not published improper payment estimates; for two programs they haven't published improper payment rates of less than 10 percent; and then in six programs, they haven't met their annual reduction targets.

Mr. NUNNELEE. So what are they doing to correct these areas?

Mr. HARDEN. By—this was the second year in a row that we had—we had reported the non-compliance, and so we are doing the current work right now, but they had to get with OMB and do some extra work this year because they have not shown compliance, but I will have to get back to you on exactly what they have done.

Mr. NUNNELEE. All right. So you—you know, we will submit that for the record.

[The information follows:]

The Department took the following actions in relation to the Improper Payments Information Act (IPIA) of 2002 noncompliant areas we reported for FY 2012:

1. USDA did not publish sufficient and comprehensive estimates for the Risk Management Agency's (RMA) Federal Crop Insurance Corporation (FCIC) and the Food and Nutrition Service's (FNS) Child and Adult Care Food Program (CACFP).

For FCIC, the Department is working with the Office of Management and Budget (OMB) and has reached out to OIG to modify its sampling methods to provide a more accurate depiction of improper payments.

For FNS CACFP, FNS officials expect to obtain the results in June 2014 of the feasibility study that FNS conducted to determine a valid and reliable method to estimate improper payments for one component of CACFP. Our audit of fiscal year 2013 IPIA compliance is ongoing. If CACFP is noncompliant for a third year, the Department will be required to submit to Congress reauthorization proposals or propose statutory changes necessary to bring CACFP into compliance.

2. USDA School Breakfast and School Lunch programs (SBP/NSLP) reported error rates over 10 percent:

We noted in our FY 2012 USDA IPERA Compliance report that SBP and NSLP payment estimates were based on an outdated study and the Department initiated actions to conduct an update. The updated study has since been completed, and the Department expects to issue the new estimates on its improper payments in SBP and NSLP by the end of calendar year 2014.

3. Six USDA programs did not meet their reduction targets in FY 2012:

In FY 2013, three of those six programs we reported in FY 2012 met their reduction targets. The other three programs that remain noncompliant missed their targets by an average of 0.5 percent. These agencies have ongoing corrective actions to address program errors.

Mr. NUNNELEE. All right. Last year you testified that there were 10 States that have not met deadlines for recommendations that you had recommended for the State compliance. Where are we with those?

STATE SNAP COMPLIANCE

Mr. HARDEN. Those are with the SNAP——

Mr. NUNNELEE. Yes.

Mr. HARDEN [continuing]. Databases?

Mr. ADERHOLT. Speak a little closer to the mike.

Mr. HARDEN. Those were with the SNAP——

Mr. NUNNELEE. Yes.

Mr. HARDEN [continuing]. Databases? And we have gotten agreement with FNS on all of those recommendations in terms of the plan forward in terms of making corrections. We had initiated work to do some follow-up work in that area, but when we started that work earlier this year, we learned that FNS had let its own contract to look at some of the very same things that we were going to look at where they were working with States to improve the methods for tracking down, you know, the improper payments. So what we are doing with that right now is monitoring how they are doing to see whether we need to go in the future, as opposed to duplicating the effort that they are doing right now.

Mr. NUNNELEE. So is it reasonable to think that when we come back this time next year, you will be able to report that they have made significant progress?

Mr. HARDEN. I will look into that and see if we can say that. I know that we can—one of the things that we are working on right now is their quality control rate, and we are continuing—we are starting to see problems with that error rate as well, as well as errors with the school lunch and breakfast. So it is a big, big problem, and they are making incremental changes.

Mr. NUNNELEE. Thank you. Thank you, Mr. Chair.

Mr. ADERHOLT. Mr. Fortenberry.

Mr. FORTENBERRY. Thank you, Mr. Chairman. Good morning.

Ms. Fong, first let me thank you, congratulate you on the major award you received. And several years ago when I was chairman of the Subcommittee on Nutrition on the House Agricultural Committee, we had a robust dialogue about fraud and waste in the SNAP program. You took some additional initiative there and dug a little deeper, and I think we have got some good outcomes, so thank you for that initiative.

I think it is important to say up front that this is America. We don't let people bleed in the street, we don't let people starve in their homes, and that is why programs such as SNAP are important. Given the magnitude of it, given the amount of money that it spends, even a small bit of fraud in it creates the potential for savings, which, in turn, are necessary in this tight fiscal time, but also it is not fair to those who are in vulnerable circumstances to have dollars that could be used to help them divided to people who are abusing the system. So this—in that spirit is why we tend to focus pretty narrowly pretty quickly on the SNAP program.

SNAP FRAUD

Back to that point, where do you find—do you find fraud in the program concentrated in one area of the country or another?

Ms. FONG. I don't think we would say it is concentrated in particular areas, because we don't—you know, it is hard to project that. We do have major investigations going on all the time around the country in all of the major urban centers that you can imagine. The initiative that we are working on with FNS has identified a couple of areas that we are going to focus on, because the State and local authorities there are happy to work with us and because we see opportunity there. And I—

Mr. FORTENBERRY. That is on the retailer side?

Ms. FONG. Retailer as well as recipient. It will—

Mr. FORTENBERRY. Let me ask you a question simply. How does the most basic type of fraud take place? In other words, if you are a SNAP recipient, somebody offers you some cash for the use of the card, is that the fundamental way in which SNAP recipients could potentially abuse the program, and the same thing for the retailer?

Ms. FONG. That is basically the scheme. There are many variations on it, but the idea is that if you are a recipient, you offer your card up. You get perhaps \$0.50 on the dollar for that, so you are free to spend that money any way you see fit, and then the retailer can redeem that card and get full value for it.

Mr. FORTENBERRY. And I recognize that this fraud in the program has dropped significantly since going to the electronic benefit, but this basic problem still potentially exists and is dependent upon the goodwill, the self-enforcement of the person using it primarily. I imagine that is very difficult to stop.

AUDIT PRIORITIES

You walked through this a little bit, but I wanted to get a better understanding of how you prioritize your work, how you prioritize your audits. Is it simply based upon the magnitude of the programs, where the money's spent, so you tend to divide up what you have in terms of resources and focus on those areas, or when something arises that looks problematic and you are alerted to it, you tend to prioritize that?

Ms. FONG. It is all of those factors.

Mr. FORTENBERRY. Okay. And who makes that decision?

Ms. FONG. We do, the senior staff within IG.

Mr. FORTENBERRY. I assume you'd want suggestions.

Ms. FONG. Absolutely. We welcome suggestions from all Members of Congress.

Mr. FORTENBERRY. Well, two points. You have asked for a budgetary increase. I think it would be helpful to do some type of study to show that if you are—the correlation between budgetary increases and better outcomes for programs measured in terms of impact as well as cost savings. That way, it helps very much justify the case for an increase in your part.

PAYMENT LIMITATIONS

The second issue before I am out of time is Ms. Pingree had a very good point. We are interested in stopping fraud, making the

system more effective no matter where it is, and in this regard, I am interested in the question of exotic legal arrangements that help skirt payment limitations and actively engaged rules, if you will, for the appropriation of farm payments. This is an area that I think we need to take a closer look at.

Ms. FONG. Yes, I appreciate that. We do have information on our return on investment. Over the last 8 years, we have averaged \$12 for every dollar invested in our operation, and so we strongly believe that any increase in budget for us will result in better and more audits and investigations that bring back more money to the government.

And in terms of payment limitations and actively engaged issues, we are very aware of those. We have a long history of carrying out investigations into schemes involving that as well as some audit work in that area. So we will take your suggestion and explore that for next year.

Mr. FORTENBERRY. Thank you. Thank you, Mr. Chair.

Mr. ADERHOLT. Mr. Rooney.

Mr. ROONEY. Thank you, Mr. Chairman.

NASS

Last month your office released an audit of the USDA's National Agricultural Statistical Service, or NASS. Your security review found that the agency failed to adequately enforce critical security procedures and physical security measures intended to protect NASS's information. You also identified several instances where sensitive commodity market data was compromised due to lapses in technology.

Has your office decided to conduct additional audits related to the security of NASS in the programs?

Mr. HARDEN. Not at this—not at this time, because they have been very receptive and proactive in working on the recommendations and the problems that we noted, and so we would probably include it as—in future planning to go back and see if the measures they took, you know, solved the problems.

Mr. ROONEY. What would you be looking for to see if they did solve those problems?

Mr. HARDEN. I mean, we would follow up on the recommendations that we just made. We would give them time to implement those recommendations and then see if they implemented them.

Mr. ROONEY. Okay. NASS collects personally identifiable information data for a number of surveys, including the agricultural census, so based on the findings in your recent security review, do you believe we should be concerned about the USDA's ability to sufficiently protect this sensitive data as well?

Mr. HARDEN. That was not something that was specifically part of it. If I can get back to you on that, I would appreciate it.

[The information follows:]

Based on our audit work, we have concerns about NASS' ability to sufficiently protect all of its sensitive data, including data containing PII. We conducted vulnerability scans of NASS' entire network on which this information resides and identified multiple critical and high IT vulnerabilities. NASS had not been timely addressing these vulnerabilities. As a result of our review, NASS created a group that has started taking action to remediate these vulnerabilities.

Mr. ROONEY. Okay. Thank you. And do you believe that NASS's security weaknesses could lead to potential violation of the agency's statutorily required confidentiality pledge?

Mr. HARDEN. I would also like to get back to you on that.

[The information follows:]

As previously stated, we found multiple vulnerabilities on NASS' network that could affect the security of the information it collects and thus its confidentiality statement. NASS is actively working to remediate the vulnerabilities.

Mr. ROONEY. USDA also has a good deal of secret and sensitive, non-personally identifiable information, including sensitive information regarding its plant and animal disease research. What is your assessment of the USDA's cyber security on this type of data?

Mr. HARDEN. That I don't think we have done recent work, but I can look in to see what we have done in the past.

[The information follows:]

In our FY 2013 FISMA report, we continued to report a material weakness in USDA's IT security, including agency IT security. The Department has not (1) developed policies, procedures, or strategies for continuous monitoring or risk management; (2) the Department and its agencies are not in compliance with baseline configurations; (3) vulnerabilities are not being remediated in a timely manner; (4) separated employees' access to computer systems is not terminated in a timely manner; (5) policies defining the detection and removal of unauthorized network connections have not been developed or implemented; and (6) policies have not been issued defining required oversight of information technology systems that contractors or other entities operate on USDA's behalf, including systems and services residing in the cloud. Until these issues are resolved, all of USDA's information systems and the information residing on these systems, including PII and sensitive information (which includes plant and animal disease information) have an increased risk of being lost, disclosed, altered, and/or destroyed.

Mr. ROONEY. Okay. I ask a lot of this because I also sit on the Intelligence Committee, so this is sort of an area that I am interested in, so I appreciate your getting back to me on—

The next question is, does the agency have sufficient resources dedicated to protecting its secret non-personally identifiable information?

Mr. HARDEN. That—let me get back to you on that one, too.

Mr. ROONEY. Finally, Mr. Chairman, does the agency have appropriate safeguards in place to ensure only those allowed to access the information are able to do so?

Ms. FONG. I am just going to interject here. And since you have a background in intelligence and data, you know that every year we have to do a review under the FISMA statute which does a comprehensive look at the Department's IT security across agencies and from the whole IT security process from soup to nuts, and I think it is safe to say that over the last few years, we have found significant issues with the Department's overall IT security processes.

We have made 49 recommendations to correct them, to come into compliance with NIST guidelines. And many of the questions that you are asking really go to the kinds of points that we have been making, that the Department needs to tighten up and come into compliance in those areas. So I just wanted to offer that as background.

Mr. ROONEY. Well, if you could also help me with the answers to those questions as well, maybe I can help you in that regard.

[The information follows:]

We had no audit work directed specifically at secret non-personally identifiable information. But, one consistent theme throughout the Department is not patching for known vulnerabilities, which cybercriminals can use to exploit systems. As part of our FY 2013 FISMA audit testing, we performed a vulnerability assessment on seven agencies that were included in our FY 2008–2012 FISMA reviews to determine if each agency was mitigating its vulnerabilities in a timely manner and thus improving its security posture. We compared the average number of vulnerabilities per device identified in our 2013 scans to the average number of vulnerabilities found during the previous FISMA reviews. For all seven agencies, the average number of vulnerabilities per device increased—in most cases the number doubled; and for three agencies, the number increased by more than eightfold. As a result, USDA systems have an increased risk of sensitive and PII information being lost, disclosed, altered, or destroyed.

Mr. ROONEY. So thank you, Mr. Chairman.

Mr. ADERHOLT. Mr. Valadao.

Mr. VALADAO. Thank you, Mr. Chair.

WIC

You mentioned FNS's work with State agencies on fraud. I know California has had problems with their WIC oversight. The WIC moratorium in California was a product of abuse of the system, and I am very pleased with the action—or action was taken. With that being said, the moratorium was set in 2008, and little has changed since then. What steps have been taken in California to address the control of high risk vendors?

Mr. HARDEN. I do know, and it is information that we will have to get to you later, but as part of our current review of the WIC program where we are looking at how States are containing costs or how costs for the food packages are determined, California is part of our review and it touches on some of those questions.

[The information follows:]

We are currently reviewing FNS' WIC program and California is one of the States included in this audit review. Our audit objectives are to evaluate the factors that contribute to the high average food costs reported for various states within the WIC program. We will also evaluate FNS oversight activities for monitoring food costs. We would be happy to brief the subcommittee once the report is ready to be issued.

Mr. VALADAO. One of the issues that we face, obviously in my part of the country in California, we are suffering from this water crisis and unemployment numbers are getting to pretty extreme numbers now. WIC is obviously something that is important to a lot of those people in the area, but at the same time, you have got new stores opened up with an opportunity for those people to be serviced or be able to purchase their product through stores closer to home, something more convenient for these people, and that opportunity is not being afforded them, and I think it is something that needs to be looked into, so I appreciate you looking into it and seeing what we come up with. Thank you.

Mr. ADERHOLT. Mr. Bishop.

Mr. BISHOP. Thank you very much.

FOREIGN AGRICULTURE SERVICE

I have a question on foreign ag service. As you know, during June of 2010, the U.S. Agents of International Development transferred \$86.3 million to the Department of Agriculture for capacity-building activities in Afghanistan, and the OIG just recently released an audit of the Foreign Agriculture Services' management of

those funds, and the program's activities in Afghanistan, and the audit found that FAS had been aware of deficiencies in the management of the capacity-building activities over in Afghanistan for quite a while, but did not adequately implement corrective actions to strengthen the management and control of activities until 2 years after the audit—after the funds were disbursed, I should say.

The audit recommended that FAS forego accepting any further USAID funds until full implementation in the form of a monitoring process and other controls were put in place.

Has FAS begun to implement the recommendations as well as those of their consultants? How much—can you tell us how much has been spent in the capacity-building activities before your audit, and did you see any positive results from the money spent? And, finally, does FAS have similar capacity-building programs in other parts of the world, and if so, should we be concerned with the management of those programs as well?

Mr. HARDEN. In terms of whether—and I may not get all the questions. If I forget one, I may ask to have it repeated. But in terms of implementing the recommendations from the consultant in response to our recommendation to get those started, we do know that those are underway. From my understanding—you know, I would have to rely on the numbers that are in the report in terms of how much money they have spent in terms of what we looked at. I do know that this was the largest amount of money in these type of funds that they had ever tried to manage, and so they recognized that as we had discussions about that, that they really were not equipped to handle it right off the bat.

And as far as capacity-building of this nature in other parts of the world, I am not aware of any, but I will go back and ask.

[The information follows:]

The Department, under the Foreign Agricultural Service's (FAS) oversight and administration, does fund and participate in various capacity building initiatives in foreign countries, with the primary intent of building future markets for American agricultural products and secondarily increasing agricultural productivity, agricultural services, and livelihoods in these countries. These projects include activities such as developing or rebuilding local market infrastructures, rehabilitating watersheds and improving irrigation infrastructure, and providing agricultural technical assistance to local producers. However, starting in 2010 with the transfers of Section 632(a) funds from U.S. Agency for International Development and/or the U.S. Department of State, the level of funding and activities by the Department increased significantly, particularly for capacity building in Pakistan and Afghanistan. Because of this significant increase in funding level, FAS commissioned an independent study to strengthen its policies and procedures and its control structure and to ensure that it could properly administer the increased influx of funds. Also, under the increased funding provided under the Section 632(a) funds, the Department's involvement changed. As part of the U.S. Government's Agricultural Assistance Strategy for Afghanistan, the Department partnered with the Afghanistan Ministry for Agriculture, Irrigation, and Livestock (MAIL) to improve MAIL's capacity to provide agricultural services to the Afghans. In this situation, FAS worked directly with MAIL to assist in developing a better infrastructure.

Mr. BISHOP. Thank you. Let me just look at the farm bill, which was really a roadmap for the management of our USDA programs for which we use. Can you tell us whether Congress addressed all of the key issues facing the Department and moving into the future? Example, the question of who is really a farmer as the farm bill terms it, who is actively engaged in farming, that is—that continues to be a somewhat vague issue and one that I think the De-

partment is developing regulations on. In theory, these regulations will potentially address the concerns of many people who believe that farm subsidies should—that farm subsidies often, not necessarily should, wind up in the hands of the people who aren't working on the farm or who don't have an active interest in the farm.

FARM BILL AND OVERSIGHT

So my question is whether or not the farm bill did enough on this and other ongoing issues, and what gaps in opportunities do you see in terms of the challenges that are facing the Department in managing agriculture under the farm bill?

Ms. FONG. Well, let me just generally comment that we are still in the process of going through the farm bill, trying to get a handle on what the new provisions are and what they might mean to us as we develop our priorities for next year's work.

I appreciate the fact that both you and Mr. Fortenberry have raised the issue of actively engaged. I think that is a very difficult and complex issue. I know in our history at USDA IG, we have had a number of cases where we have taken successful prosecutions against people who have taken advantage of some of the different approaches to that, people who've, you know, engaged with some—created 17 or 18 straw partnerships to triple or quadruple or whatever the amount of money they get under that program fraudulently. So we are aware that there are some vulnerabilities in that, and I appreciate your raising that.

PROGRAM FRAUD

Mr. BISHOP. How does the fraud, waste, and abuse with regard to the insurance programs, the FSA programs stack up with the fraud in nutrition in terms of dollars with the nutrition programs, such as SNAP, WIC and the other nutrition programs?

Ms. ELLIS. I think that based on the work that we have done the past several years and with the large influx of funds in the SNAP program, we are seeing a large amount of fraud there just because it is large dollars.

With regard to farm programs, I do know that we have cases across the country both in the various farm program cases as well as crop insurance. So far our work is not stacking up to the same amount as we are on SNAP.

Mr. BISHOP. But in terms of the percentage of fraud and the dollars in fraud, do the nutrition programs add up to more fraud or less fraud as compared to the disaster programs and the FSA programs?

Ms. ELLIS. It is hard for us to actually figure out what the fraud amount is. What I can go based on is the type of work that we do and where we are spending our time, and with regard to SNAP—

Mr. BISHOP. You don't have any idea about the number of dollars?

Ms. ELLIS. No, because we don't know all of the fraud that is actually going on. There could be parts of fraud that I am just not aware of.

Mr. BISHOP. I mean the ones that you have investigated—

Ms. ELLIS. Right.

Mr. BISHOP [continuing]. And that you have found?

Ms. ELLIS. We have—the larger amount has been in the SNAP program as opposed to the other farm programs.

Mr. BISHOP. And just to follow up on that, was it on the part of those administering the program, was it on the part of those who were recipients? Where do the fraud—was it the vendors?

Ms. ELLIS. With regard to SNAP, our responsibility is chiefly with the retailers, so our work is mainly with the retailers and that is where we are seeing the fraud. The States and the locals are responsible for dealing with the majority of the recipient fraud.

Ms. FONG. Just to offer a couple of comments on the dollars. Just looking at our investigative statistics for the last 2 years or so, in the farm programs, we had about \$33 million in terms of investigative recoveries for fraud, and in the crop insurance program, about \$40 million. There is a huge case in North Carolina involving the tobacco farmers that accounts for much of that. So I think what we are seeing is that when we find fraud in those programs, they tend to involve multi-million dollars and many people.

Mr. BISHOP. In the FSA programs?

Ms. FONG. FSA and RMA.

Mr. ADERHOLT. We are going to need to move on. Mr. Yoder.

Mr. YODER. Thank you, Mr. Chairman.

Inspector Fong, thank you for your testimony this morning. I appreciate having you before the committee. Certainly a lot of issues have been covered. There are probably many, many more we won't have time for this morning, as the USDA's a vast agency with a lot of responsibilities. I think a lot of our conversation this morning has been how we try to provide the services the USDA is supposed to provide for the most amount of people and the most effective and cost efficient way, which is, I think, what everybody, both parties and everyone in this town, I think, hopes occurs.

WIC

I would like to discuss maybe one that hasn't been brought up this morning, and this is the WIC program. And I don't know if you are familiar with the Government Accountability Office report last year about the WIC program in February of 2013, which was entitled "Improved Oversight of Income Eligibility Determination Needed", and it highlighted some disturbing trends that have occurred in the WIC program related to how States are implementing it in an inconsistent manner, and it talks about, in part, how over 60 percent of States use only income within the last 30 days, when the standard for WIC eligibility is annual household income. They only count a portion of the income of a household instead of the household—income of every member of a household.

Some States have increased their eligibility threshold beyond the 185 percent of the Federal poverty level and their adjunctive eligibility options that as States increase the threshold for other programs, then they become adjunctively eligible for the WIC program.

The GAO study found that the FNS has never examined the reports for State and local WIC agencies' compliance with Federal regulations despite over one-third of the States having problems in this area, and that the last time the FNS provided guidance to

States on the income eligibility determinations was 1999. This has led to a point where now over half of the infants in the country, born in this country start out on a Federal program. They start out on the WIC program. And so we want to ensure the dollars we spend go to the families that are most needy, and that the idea that the majority of the country would be on these programs from birth because of ineffective implementation from States is very concerning to, I think, all of us on the committee.

And I guess, are you familiar with this report, and what sort of inspection have you looked into as to how the FNS could resolve these concerns that were, I think, disturbingly brought up in the GAO report?

Mr. HARDEN. I guess just as a way to start, being as GAO was already looking at that, we did not do work on income eligibility just so that we weren't duplicating efforts, but yes, we were aware of what they were doing.

Some of the work that we reported on last year that would be a little different but is also part of the problem is how States oversee the vendors and their vendor management, because they have a new rule on that, and we noted some similar type problems where they weren't doing the monitoring that they should have been doing.

And currently we have work in process to look at how States—the cost of the food baskets for the different participants, to see how some States make those dollars go further than others and if there are ways that we could have more consistencies in that from State to State.

Mr. YODER. So are you aware of FNS efforts to correct these problems that were cited in the GAO report?

Mr. HARDEN. I would have to go back and look and see what they said they were going to do. And I don't have specific work right now to see if they are doing those, if that is what you are asking.

Mr. YODER. Right. So as far as you know, these—the States' implementation that is inconsistent in allowing these things to occur, it is continuing to this very day?

Mr. HARDEN. We are seeing some of that in our work, that there are inconsistencies from State to State.

Mr. YODER. Well, I would actually look into that. There are many, many areas where this occurs where we have States that don't follow the guidelines, and it is not fair, and I think the folks in States that do follow the guidelines and if the policies are implemented in an inconsistent way, it doesn't get to the people that need it the most as these programs get stretched and expanded beyond our capacity to—to support them.

Just maybe one general question on USDA and their size and operation. I mean, one of our hopes on this committee is that we can, you know, run a leaner operation in Washington, D.C., therefore allowing the dollars that we do spend here that are scarce, to be able to spend them to actually help folks who need them the most.

What measures have you suggested or have you seen USDA can use to provide greater services to farmers and folks that they are charged with overseeing and regulating and providing services to in a more cost-effective manner using technology, or in a way that

might create savings over the long-term? How can we run the USDA in a more cost-effective manner?

OPERATIONAL EFFICIENCY

Mr. HARDEN. I have to go back and pull some specific recommendations, but we have noted across the Department and in terms of talking to the program officials, the agency has, in terms of now that you are in a leaner operating environment, to really look at their operations from a risk-based approach to make sure that they are prioritizing their work and monitoring where they really need to be spending that.

[The information follows:]

As part of our mission to promote economy, efficiency, and effectiveness, we have included steps in our reviews to identify cost savings and efficiencies in USDA farm programs, to include providing services to American farmers.

During our review of RMA's controls over prevented planting, we found that RMA inadvertently provided incentives to actively encourage prevented planting claims. (Approximately \$4.6 billion prevented planting claims were paid from FYs 2008 through 2011.) We also found that loss adjusters did not fully document and support eligibility for over \$43 million in prevented planting payments. Approved insurance providers (AIPs) are not being held accountable for making and supporting the required determinations because RMA has not issued adequate guidance for determining whether acres are available for planting. We recommended that RMA obtain updated pre-planting cost information and use it to reevaluate the current coverage levels provided for prevented planting; make any necessary changes to reduce program costs, where possible; and bring the coverage levels consistently in line with preplanting costs for each crop. We also recommended that RMA improve its criteria for determining if acres are available for planting, and emphasize that the determination must be supported and verified. (*RMA Controls Over Prevented Planting*, 05601-0001-31, issued September 2013.)

We recently initiated a review of the Beginning Farmers and Ranchers initiative in the Department. The objectives of our review include determining whether the classification is being applied properly, the benefits of that classification are going to eligible participants, and outreach efforts for beginning farmers and ranchers are effective and adequate.

In addition to USDA farm programs, we have identified potential cost savings and ways to increase efficiencies and cost effectiveness in other USDA programs, including nutrition assistance and food safety programs that benefit the American public. Below are examples of some of our recent audit work in these other USDA programs.

Our audit of Forest Service (FS) Recovery Act grants for wildland fire management activities found that FS lacked the necessary controls to ensure that the grant funds were both properly accounted for and used for their intended purpose—not just for Recovery Act grants, but for the entire grant program. We also found that FS did not enhance its existing controls, despite the Recovery Act's requirements for greater transparency and accountability. As a result, the grant recipients we reviewed charged a total of \$92 million in unallowable and questionable costs to both Recovery Act and non-Recovery Act grants. Of this total, \$63 million came from grant recipients without adequate financial controls and processes, while \$29 million stemmed from FS and other entities' lack of adherence to the Recovery Act's objectives. We also found that FS staff did not take necessary steps to ensure that it met the Recovery Act's overall objective of maximizing job creation and retention in the most cost effective manner possible. We issued a number of recommendations to further strengthen FS' controls over future grants and address unallowable or questionable costs. (*American Recovery and Reinvestment Act - Forest Service Hazardous Fuels*

Reduction and Ecosystem Restoration Projects on Non-Federal Lands, Audit 08703-0005-SF, issued March 2013.)

In April 2012, the Secretary of Agriculture requested that we evaluate the procedures used by the Office of Advocacy and Outreach (OAO) to select the FY 2012 proposed recipients of grants funded through the Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers Program (Section 2501 Program). Our review found that OAO initially selected applicants to receive a total of \$20 million in grants, even though these applicants may not have been the most meritorious and deserving candidates. OAO officials disregarded regulatory requirements and guidelines cited in the Funding Opportunity Announcement in making those selections. Also, they had no documentation to support their decisions and could not explain why some applicants that appeared more deserving were not selected to receive grant funds. Based on our Fast Report, OAO reselected applicants for the Secretary's consideration in July 2012. We evaluated the process used to reselect applicants and concluded that it was more impartial and transparent than the process used to select the initial applicants. (*Office of Advocacy and Outreach—Controls Over the Grant Management Process of the Office of Advocacy and Outreach, 91099-0001-21, issued February 2013.*)

Our audit of Supplemental Nutrition Assistance Program (SNAP) retailers found that the Food and Nutrition Service (FNS) does not have clear procedures and guidance to carry out key oversight and enforcement activities to address SNAP retailer fraud, or adequate authority to prevent multiple instances of fraud—either by a particular owner or within a particular location. In addition, FNS regional offices put their limited resources towards other activities, such as retailer authorization, rather than assessing and enforcing retailer penalties. As a result, the integrity of SNAP is at risk because FNS does not consistently provide deterrents for trafficking. From a sample of 316 locations, we found that FNS did not properly determine potentially \$6.7 million in penalties, and authorized 51 ineligible store owners, who redeemed over \$5.3 million in benefits since 2006. In addition, we identified 586 owners allowed to continue participating in SNAP at other locations after being permanently disqualified, and 90 retail locations that had two or more firms permanently disqualified. We issued a number of recommendations, including recommending that FNS develop policy and regulations, proposing the Secretary seek legislative changes, and recommending that FNS further review the owners identified in our audit. (*FNS: Controls for Authorizing Supplemental Nutrition Assistance Program Retailers, 27601-0001-31, issued July 2013.*)

Our review of vendor management in the Food and Nutrition Service's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) found that FNS' management evaluations (MEs) did not identify and correct significant issues in the vendor management processes at two State agencies operating WIC. We found that the Michigan State Agency, which uses an electronic benefits transfer system, properly monitored vendors. However, we found that the Illinois and Florida State Agencies, which still use paper food instruments, lacked sufficient controls to track vendor violations, and to ensure timely and appropriate sanctions. As a result, vendors were not disqualified, as required, and could redeem an estimated \$6.6 million in WIC benefits

during their required periods of disqualification. Additionally, FNS did not ensure that all retail vendors disqualified from SNAP were also disqualified from WIC. We estimate that these vendors could redeem approximately \$51,000 in WIC food instruments that they are not authorized to redeem. We issued a number of recommendations to strengthen the ME process and disqualify the identified vendors. (*Vendor Management in the Food and Nutrition Service's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)*, 27601-0038-Ch, issued March 2013.)

OIG reviewed how FSIS and AMS manage their workforces—employees responsible for inspecting and grading food products—at a time when restricted budgets may impair the agencies' ability to carry out their missions. We found that FSIS and AMS generally managed their workforces effectively, but improvements were needed. OIG found that FSIS inspectors often worked far more hours than their AMS colleagues, a situation that could impair food safety. Both agencies could improve how they monitor or bill industry for their services. FSIS could not adequately reconcile reimbursable overtime charges to industry with the overtime recorded by field staff in its timekeeping system, which could potentially have resulted in up to an estimated \$10.6 million in under-billed overtime and up to an estimated \$4.7 million in overcharges to industry. We recommended that both AMS and FSIS improve how they manage overtime and billing of industry, plan for workplace succession, and cross-utilize their human capital resources. (*FSIS' and AMS' Field-Level Workforce Challenges*, 50601-0002-31, issued July 31, 2013.)

Mr. HARDEN. The analogy I use with them is, in the past, if you had a priority to look at 10 things, and you can't look at all 10 things anymore, you can only look at five, tell me what those five are and how you got to those decisions so we can either agree or disagree as to how you got there.

And there is a variety of work that we have done, and I have to go back and pull specifics where we talked to them about their use of computer information systems in rural development as well as some of the farm programs to better use that information or have the information to do it on a leaner staff.

Mr. YODER. And the reason I really go to this point—I think this was brought up by one of my colleagues as well, is that you have, you know, we have fewer farmers today than we had years ago, and is the USDA, are their operations consistent with the dollars per farmer ratio? How are we responding to the changing agricultural world?

Ms. FONG. I think one of the things that we have been seeing in our reviews across the board is, as you mentioned, it is important that the States implement effectively and consistently all the programs that they have. It is also important that USDA program managers and agency officials communicate effectively with their State and regional structures, the Federal structures. As the programs decentralize and more staff is put into the field and the responsibilities devolve into the field, it is critical that the field employees really understand the programs, the requirements of the programs as they administer them, with respect to individual farmers, conservationists and ranchers.

We are seeing that with the departure of institutional knowledge and less staff and perhaps less training, there needs to be increased focus on that, on the part of the USDA officials at the management level.

Mr. YODER. All right. Thank you for your response. Thank you, Mr. Chairman.

Mr. ADERHOLT. Inspector General, when I started out the questioning, we talked about the challenges and the Department knew enough to address some of the issues and successes that we see.

Let me pose one question to you just summing that up.

DEPARTMENTAL PRIORITIES

If you were the Secretary, what would you focus your efforts on in that regard as far as trying to make sure that the issues that are before you that you see that need to be dealt with from your chair as Inspector General and you were advising the Secretary, or if you were to change positions to be the Secretary, what would be the effort that you would focus on?

Ms. FONG. I think it all goes back to the very basic issue of leading and managing the Department with a diverse portfolio. You have to set a very strong tone, which I believe the Secretary does, that management is important. It is important in delivering our programs that we deliver them effectively to the right people and that we avoid situations where fraud or improper payments could occur. And that message needs to then permeate the organization. It is a huge organization. I think each agency has its challenges in terms of workforce and resources and training and priorities, but

I do believe that this Secretary and Deputy Secretary have set that tone and are willing to be very supportive of the message that we bring forward as the Inspector General's office. When we find situations that require attention, we find that the Department does respond very positively to that.

Mr. ADERHOLT. The USDA is making improvements but still has problems with accurate reporting of improper payments as we have discussed. In your testimony, you note that USDA has taken more effective measures, or if they had taken more effective measures to avoid noncompliance, it could avoid \$74 million in improper payments. What could USDA have done to save that \$74 million?

IMPROPER PAYMENTS

Ms. FONG. I think that goes back to our audit report that we were discussing a few minutes earlier about whether USDA was in compliance with the Improper Payments Act; and the \$74 million is our estimate of what USDA could have avoided if it had taken steps to comply with every portion of that Act.

Mr. HARDEN. More specifically, if they had met the targets for reducing improper payments that they set for themselves, or for the six programs that that was associated with, they would have avoided \$74 million in improper payments; so it is them meeting their targets.

Ms. FONG. You all probably are aware that the provisions in the Improper Payments Act now require USDA to work with OMB to actively address the situations this year because it has been 2 years in a row that the Department has not met those targets. What happens next year is if the Department continues to miss its targets, the Department is then required to work with Congress to determine ways to address these issues, so there is an escalating set of requirements in the Act.

SNAP FRAUD

Mr. ADERHOLT. Your report on SNAP retailers raise concerns about the Food and Nutrition Services ability to effectively carry out oversight and enforcement activities related to fraud, and we have talked quite a bit this morning about the SNAP issues; but the subcommittee has repeatedly directed USDA to permanently disbar retailers that are found guilty of fraud, yet the report found that some retailers were still participating in the SNAP program after being permanently disqualified. What more does the Food and Nutrition Services need to do to ensure fraudulent retailers are permanently removed from SNAP?

Mr. HARDEN. That is where we made recommendations where we felt that legislative changes were needed, and we are currently working with FNS to get agreement on those. Their most current statements to us is that there were changes in the farm bill that may address some of the issues that we had. We are waiting for them to show us those things to see if whatever the provisions were would address the problem. If not, we will continue to work with the Department to make that a proposal, because that is something we feel that should be done.

Mr. ADERHOLT. Thank you. Mr. Farr.

Mr. FARR. Thank you, Mr. Chairman. I want to invite you out to my district. It is a different perspective on agriculture than I think your State. I represent one county, Monterey County, that the gross sales of—there is over 100 crops grown in the county, and the gross sales exceed that of 25 States in the United States of their total agricultural sales. And it doesn't have any subsidies at all. No water subsidies, no power subsidies, no conservation subsidies, no price support. We don't grow the commodity programs, but we do rely on, you know, people eating nutritious food because that is what we grow, the salad mix of the world.

And we have a lot of poor people harvesting those crops, and they do rely on the WIC program and the SNAP program, and I think it is right that we look at particularly the retailers that are defrauding. Individuals, I think that amount of money to try to collect from a poor person because they bought the wrong thing is, we ought to put the emphasis on, as you have stated, on the retailers.

FOREIGN AGRICULTURE SERVICE

I want to shift, because I think one of the biggest frauds that has happened to the United States has been our expenditures on the war efforts in Iraq and Afghanistan. All we hear every day is the amount of contracts that have been let that don't—and you talk in your paper about, and I think Mr. Bishop brought it up, about capacity building. And as a returned Peace Corps volunteer, I am very interested in countries' capacity building.

We just got back from Colombia, which we did a very successful thing with capacity building there. The unfortunate thing is that almost every single contract let was to an American company, so we really weren't building capacity within Colombia or Afghanistan or Iraq. We were building capacity of American contractors.

Your report points out that the Department of International Development transferred \$86.3 million to USDA to work on capacity building, I guess agricultural capacity building in Afghanistan; and your review found that senior managers of FAS were aware of the general control weakness before receiving the funding. Nevertheless, the FAS had not implemented performance-monitoring plans for all the projects until over 2 years after the first project began. You go on to say, without adequate management controls in place, FAS cannot effectively monitor these projects and faces difficulty in providing adequate insurance that the funds are effectively accomplishing the program goals, the program goals being capacity building.

FAS has agreed to all the recommendations. So what happened? Did anything happen? You just agreed to the fact that you indicated that these things weren't in place and that there was money misspent?

I don't think Congress is asking enough questions about how our money is being spent, and I think capacity building is very important, but we ended up trying to dictate what capacities they ought to build, spend our money on it, and they don't use it, like that big, huge warehouse that we built in Afghanistan, millions of dollars, that the Afghans didn't want. We found out in Iraq we built all kinds of generators for people but never taught them how to run the generators or change the oil and all that is melted down. I

mean, there is tons and tons, millions and probably billions of dollars misspent.

As your Council of the Inspector Generals on Integrity and Efficiency, have you collectively looked at our capacity building, so-called capacity building expenditures, in our war effort? Because you are looking agency by agency, and I wonder what the sum total of that—

Ms. FONG. Actually, USDA has a very small piece of capacity building in effect in Afghanistan. Most of the money that is going there my understanding is it is coming through State, Defense, and AID, and the Inspectors General at those agencies are working together very closely. They are on the ground in Afghanistan. The Special Inspector General for Afghanistan Reconstruction has issued a number of very hard-hitting reports showing that the funds have not been going to where they should be going.

My understanding is that at USDA, this is the one piece of the funding pot that we have. We don't have any more because FAS recognizes that it needs to put into place a management system of controls before it accepts any more funds. So I think from a macro level, the IGs are in there. At USDA, it is a very small piece of our portfolio.

Mr. FARR. In this case they knew before they even received the money they didn't have adequate implementation in place?

Mr. HARDEN. Yes, and part of the reason why we couldn't get any further into that issue is there was lots of finger pointing when we started asking the questions, and the people that accepted the money and were running the programs when it started are no longer there.

Mr. FARR. I know my time is expired, but I just want to have you think about this. Capacity building is our future. If we are going to get out of anything, we have got to leave the host company with its capacity to function. And it seems to me we do not review. We just sort of throw money. It is a war. We got to fight the war, and we waste so damned much money that we shouldn't be wasting. We ought to be smarter about capacity building, and we ought to have your inputs on how to do that.

Mr. ADERHOLT. Mr. Fortenberry.

Mr. FORTENBERRY. Give me your highest recommendations, your best recommendations, for legal changes that would save money and improve outcomes.

LEGISLATIVE RECOMMENDATIONS

Ms. FONG. Well, I think we talked a little bit a few minutes ago about our recommendations in the retailers, the SNAP retailer report. Other recommendations are to look at implementation of how programs are being run. I am thinking in terms primarily of the crop insurance program to make sure that the improper payments rates are being hit there and that the program is being implemented and overseen as effectively as it can be as well as the conservation programs. There have been a number of new programs enacted that we want to take a look at. We recognize that there are a number of management challenges there that need to be addressed.

Mr. FORTENBERRY. I assume the mission of your office is twofold. One is to ensure effective implementation of the law as written by Congress, but then to turn and make suggestions about how if the general goal is such, certain programmatic changes empowered by legal considerations could be implemented to make, again, the outcome more effective. The more you can specify that, the more helpful it is. This conversation has been very good and productive and helpful, but again, bringing it down into very narrow specifics that we can include in must-pass bills. Not a lot of things get passed on a regular basis; but when we have something that can improve outcomes and save money, it is helpful, I think, to all of us, speaking on behalf of my colleagues, with limited staff and limited resources to be able to pinpoint specific things in terms of an outcome here.

Again, it is not meant to put you in a political position, but consistent with the mission that is already laid out in law, if certain changes would be made, this mission would be met better and/or savings could be achieved.

Ms. FONG. In that spirit, I would draw the committee's attention to the question of overlap and duplication in programs. I think all of you know that GAO has issued a number of reports on overlap and duplication across government entities. And some of the issues that they identify were potential overlap in nutrition programs as well as potential overlap in RD and business enterprise programs. And we have issued a report, I think in the last year, making some recommendations with respect to nutrition programs and how the Department and Congress could think about those issues.

We are in the process of doing a report on potential overlap and duplication in the RD business enterprise programs which I think will be issued in the next several months, so I would draw your attention to some of those reports.

Mr. FORTENBERRY. I am familiar with the GAO's last work in this regard, and I think they are in the process of updating that now. One of the difficulties is we always want a number. Give us the number of what we can save. In those reports, the GAO is hesitant to give a number, preferring instead to talk in terms of broad ranges of a probability of tens of millions of dollars, where some people interpret this as into the billions or even hundreds of billions of dollars. So that is one of the difficult problems here, again, to narrow it down and to try to get hard numbers, so that we can prioritize what makes sense and work it through a process here which is, again, quite difficult to get consensus with.

Thank you, Mr. Chairman.

Mr. ADERHOLT. Ms. Pingree.

Ms. PINGREE. Thank you, Mr. Chair. Thank you for all your comments and answers here today.

ACTIVELY ENGAGED RULES

At the risk of duplicating, I just want to reinforce what Mr. Fortenberry talked about; Mr. Bishop talked about this, and I mentioned it in the beginning; but I do think there is particular interest in some of the things that you talked about, the actively-engaged rules. Mr. Bishop said, you know, the idea of people who receive direct payments and other subsidies that have nothing to do

with or aren't really participants in farming. I know there is always a lot of political interest around SNAP and SNAP recipients and retailers and all the fraud and potential fraud in that program and how much it can add up because of the big dollars in the program; but as you mentioned earlier, sometimes in the subsidy programs when you discover that there has been a lot of people involved, \$33 million, \$40 million, nothing gets under people's skin like this idea that there are crop subsidies going out there that don't go to farmers they go to, you know, mainly ZIP Codes in big east coast cities. I mean, there is just a lot of interest in this, and I know you have done some work; but I just want to reinforce that this is an area, I think, of continuing concern. It came up a lot in the farm bill, and with all the changes in the farm bill I know it will take you a while to sort out how this could be looked at; but I just think it is a really critical area to be examined. The dollars are high.

You mentioned that there is always a lot of exotic legal arrangements, legal maneuvers. I would say the second thing that really gets under people's skin is when they realize that a lot of lawyers figure out a lot of fancy maneuvers and then somehow the money doesn't go to the right people.

Mr. Farr mentioned an issue that is a big issue in my district. I don't have a lot of subsidized crops. I don't have corn, wheat, all the big ones; but we have a lot of vegetable growers, a lot of people who are trying to expand their very small farms. And the first thing they will always say to me is how come the money always goes to all those other guys and there is so little available to us?

It is a huge resource issue for USDA. Every time we manage to enhance a little bit in some of those areas, people always look at it and say, well, what about the billion, 70 times as much money goes into the commodity crops as into "specialty crops," which is really the vegetables and things that people want to buy locally. They want to buy direct. There is huge consumer interest in this.

I just can't say it enough. I thought that one of my issues that I was so pleased that Mr. Fortenberry brought up but I was going to say the same thing is sometimes the only way you can skirt a legal maneuver is by understanding what legal changes Congress can make that at least it will take the lawyers 3 years to figure out how to change it again.

So I think that is extremely beneficial, particularly in this area, where it is not just the simple thing of, you know, SNAP fraud, somebody gives their card to somebody else. You know, it is not that easy. It is very complicated. I understand that, but sometimes that means we need real suggestions and ideas of how to get at the root of this and how to make those changes, because I think this is a big issue in how resources are divided around supporting farmers in this country and very lopsided. And as you said, when the fraud is discovered, it is usually big. It involves a lot of people, and it is often not going to the people who are literally are putting the hard work in a farm every day.

So I do hope as you are looking into the next year and how your resources will be spent, that you really hear that that is bipartisan across the board, across the country, people are concerned with that issue.

The only other thing I wanted to bring up, and I think you have answered a lot of questions about are there adequate resources; it seems as though given the number of things we want to know about and the challenges that are out there, there are never adequate resources, particularly in cost-cutting time, but it would be helpful just to hear a little bit more about that.

WIC

Oh, and the only other specific question I was going to ask you previously, you mentioned something that you were looking into in the future about WIC food costs. I didn't know exactly what you were referring to. So to the little time I have, and I know you are going to say you need more resources; so maybe you should answer the food cost thing first.

Mr. HARDEN. On the WIC food costs, we have got an audit currently underway where we are looking at how States manage those costs and with the food packages. We have seen some States have high food costs, others have lower food costs and see if there is any efficiencies or consistencies that can go from one State to another. That is something we are working on now and expect to have out in the next several months.

Ms. PINGREE. Thanks. I am good.

Mr. ADERHOLT. Mr. Bishop.

PIGFORD II

Mr. BISHOP. Thank you very much. The OIG recently released its Pigford II audit, which was required by Congress as a part of agreeing to fund the settlement of the case against the Department. I was pleased to learn that in your opinion, the final adjudication process of Pigford claims and related administrative issues went relatively smooth outside of a handful of claims, I think about 20, which may not have been handled properly.

In your audit report you said that in connection with our audit, nothing came to our attention to indicate that the administrative entities were not adequately implementing the claims process in accordance with the settlement agreement. So it would appear that USDA and the Department of Justice did a pretty good job in managing and placing the adequate controls on the final adjudication process. Would you say that that is correct? And of the 20 problems that you had, how many claims were successfully paid out appropriately?

Ms. FONG. Let me just offer a couple of comments on that audit. As you point out, we are required by law to do an audit, a statistical sampling audit, of finally adjudicated claims. Because this issue has been of great interest to a lot of people, we decided to do an audit prior to final payout of claims just to make sure that the process was running correctly; and so as you pointed out, we generally found that the process that was developed was a good process to handle the adjudication. We did find some problems that we pointed out to the neutral and arbitrator, and they, to their credit, took action on those during our audit and are dealing with that.

They are now in the process of getting ready to pay the claims, at which point we are now starting our statutorily-required audit

of the claims that have actually been paid to make sure that the money is going to the right people who are eligible. So I just wanted to tell you that we are doing a little bit more than required by law to ensure that this whole process runs effectively.

Mr. BISHOP. How many total claims were there, are you paying out?

Mr. HARDEN. Say in the neighborhood of 40,000. I would have to go back and get the specifics.

Mr. BISHOP. Somewhere in the neighborhood of 40,000?

Mr. HARDEN. I think so, but I would have to go back and——

[The information follows:]

With respect to the *In re Black Farmers Discrimination Litigation*, the Claims Administrator received approximately 40,000 claims during the entire claims process. According to the final accounting document, dated August 2013, 18,409 Track A claims were approved for awards, totaling over \$1.1 billion. There were no Track B claims approved.

Ms. FONG. That are going through the process.

Mr. BISHOP. And you picked up some possible problems with 20 of those?

Ms. FONG. Well, we took a sample of 100 claims to look at, and of those 100 claims we found 35 of them had some questions. So that was a random sample. At this stage of the game we are now involved in auditing claims that have actually been paid, and we will see how that turns out.

BUDGET IMPACTS

Mr. BISHOP. With regard to the staff reductions that you have experienced, you have gone through several staff reductions, including volunteer buyouts and early retirements. Given the impact of sequestration and the related administrative reductions in the Department spending, your staff has been hit pretty hard. What has been the impact on your ability to carry out your responsibilities, to identify and undertake new audits and investigations with which you are tasked; and are there audits which you would like to have undertaken but you were unable to undertake as a result of a lack of funding or a lack of staff?

Ms. FONG. Well, as you know, we were not exempt from any of the reductions and sequestrations, and as a result of that, we have taken significant reductions to our resources, especially on our staff. We are at the lowest level of staffing that we have ever had. And because of that, we have had to really narrowly define our priorities and we have only been able to focus on the highest priority work.

We are very grateful for the increase that you all are giving us in 2014. In fiscal year 2013, we had to basically eliminate training. There was a period of time where we could not do any job-related travel on our investigation side, which, as you can imagine, was very challenging because allegations of fraud come in from around the country; and if our investigators can't travel there, they can't really look into that.

On the audit side, we have lost very experienced staff. We are unable to backfill there. And so we weren't able to undertake all of the audits that we would normally want to undertake. As you know, the IG function is a level of resource function. To the extent

that we have resources, we can do more work, and we can bring back our return on investment, which is roughly \$12 for every dollar invested, so we believe that we are a good investment for the taxpayer.

Mr. BISHOP. But you haven't been able to do all that you were obligated to do with the directives that you received from Congress and under the law because of limited resources?

Mr. HARDEN. I would say on the audit side, the way we continue to prioritize our work, those mandatory items, if we have direction from Congress on like the financial statements or IT security or improper payments, those go at the top of the list. Those are the first ones that are going to be part of the plan. Then we go into what I view as our discretionary time; and that is where we really look at the risks associated with different programs of the Department. Are they a new program? Have we seen problems before? And we continuously have to prioritize that each year. As staff has gone down, then there is less to this plan; but we, you know, try to keep that on the forefront as we go.

Mr. BISHOP. Thank you.

Mr. ADERHOLT. Let me follow-up with a little bit of what Mr. Bishop was talking about as far as the resources. In your testimony in the most recent semiannual report to Congress, which was released last December, you write that since fiscal year 2012, the Office of Inspector General's appropriations have fallen to the lowest level since 2008, and the staffing is at the lowest level the agency has established. Of course, Congress was able to provide full funding for your office for fiscal year 2014. Will this allow you to address the staffing needs?

Ms. FONG. We are, right now, backfilling or filling critical vacancies that became vacant, and that is very important to us. We are also anticipating that we will be able to do some hiring of entry level auditors and investigators which is critical to our future success. We have not been able to hire new staff for several years because of hiring freezes and, you know, the potential for furlough, which fortunately we didn't have to do. So we are looking this year to bring back and fill some critical vacancies. We don't have a precise number yet, but we can keep your staff apprised of that.

Mr. ADERHOLT. How will the full funding affect the priorities that you set for your audits and investigations for the remainder of the fiscal year?

Mr. HARDEN. I guess the way I would answer that is we are implementing our plan as we put it out last October. But next week, I meet with all of my audit directors from around the country to talk about are there any mid-course corrections that we need to make? Is there anything that we thought was a priority that really wasn't the priority that it needed to be; is there something that needs to take its place? That is something we do at least twice a year to see if there is any specific changes. And then we make changes to the plan as different things come in and are brought to our attention like if there is a congressional request or something from the Secretary's office.

IT SECURITY

Mr. ADERHOLT. Inspector Fong, you talked a little bit about IT security. In fiscal year 2010, 2011 and 2012, USDA had the worst cyber security score of all the large departments. As you know, USDA's score comes from your office or the office of the chief information officer. The score board for fiscal year 2013 has not yet been released. Do you see improvements?

Ms. FONG. We would characterize the Department's progress on this as slow but moving in the right direction. We have, as you all know, issued a number of very significant audits on various aspects of the IT security program at USDA. The bottom line here is that the CIO recognizes that this is a major weakness that needs to be addressed. And what we are recommending to the CIO is that they identify and focus on a priority grouping of issues to deal with and accomplish that and then go ahead and move on with identifying a second group and a third group and a fourth group, so that at least they can show measurable progress. What we have seen is that in the last year, the CIO has issued some significant policy directives in three areas in the Department to give guidance to the agencies. We think that is a very good first step. They need to keep continuing to take concrete steps and ensuring that the agencies then implement within their own jurisdictions, and that, I think, is one of the big challenges for the CIO.

Mr. ADERHOLT. Does Congress need to consider legislative changes to help USDA address the problem?

Ms. FONG. I should give some thought to that. My initial response is that there is quite a bit of guidance in law and regulation. NIST puts out all kinds of directives on how these programs need to be addressed. I don't think there is a lack of guidance and requirements. So I am not sure what additional legislative action would be appropriate. Perhaps continuous reporting might be useful.

Mr. ADERHOLT. Mr. Farr.

Mr. FARR. Thank you very much, Mr. Chairman. I know as we have this discussion, it strikes me that the IGs are sort of the fiscal grand jury of the Federal Government. You do these reviews like our civil grand juries do back in California, and they come up with recommendations for how a local government can improve itself. I just wondered if, as chair of the Council of Inspector Generals on Integrity and Efficiency, CIGIE; is that what you call it?

Ms. FONG. CIGIE.

Mr. FARR. How do you pronounce it?

Ms. FONG. CIGIE.

Mr. FARR. CIGIE. As chair of CIGIE, is there a report that CIGIE puts out every year sort of prioritizing what are the common needs of across-the-board, all 73 agencies that have IGs?

Ms. FONG. Actually we do. We put out an annual report to Congress and the President. And I would be happy to provide your staff with a copy of that.

Mr. FARR. Yeah, I think it would be very interesting. I think Mr. Fortenberry and Ms. Pingree, and what all of us up here have said is that we are looking for fixing things that are broken. I would hope that maybe even the Council could talk about it. Do the re-

ports the way you are doing, but it would also be very helpful to us if you get a list of, this is the first hearing we have, so all of the Department of Agriculture is going to come in here after you, and it would really be good to set us up with, you know, things that, you know, need fixing, that we could address our approach to, address our questions to.

So I think that the presentation for all IGs would be improved if we could get those kinds of questions that everybody here has been asking you; and I just take it back to the Council and see if that could be part of the presentations that you all make. I think it would put us and your IGs in general in a much better, more useful, I guess, more useful to us as lawmakers rather than just—certainly the audits are important and all of that, but the information from those audits is try to improve our law making. That is what we do, and our allocation of limited resources. Thank you, Mr. Chairman.

Mr. ADERHOLT. Mr. Bishop.

Mr. BISHOP. Nothing.

Mr. ADERHOLT. Okay. Well, thank you for your testimony here this morning, and we look forward to working with you as we go through the appropriations for fiscal year 2015; and, again, we appreciate your information and look forward to following up on some of the things you will be presenting to the subcommittee on the follow-up questions, so with this, the hearing is adjourned.

UNITED STATES DEPARTMENT OF AGRICULTURE
 INSPECTOR GENERAL
 QUESTIONS FOR THE RECORD
 HOUSE AGRICULTURE APPROPRIATIONS SUBCOMMITTEE HEARING
 MARCH 5, 2014

QUESTIONS SUBMITTED BY CHAIRMAN ROBERT ADERHOLT

OIG PRIORITIES, CONCERNS AND RECOMMENDATIONS

Mr. Aderholt: What are USDA's top management and programmatic challenges?

Response: OIG has identified several top management and programmatic challenges facing the Department, which are reported each year to the Secretary in OIG's USDA Management Challenges report. This information is also reflected in USDA's annual Performance and Accountability Report.¹ OIG's August 2013 USDA Management Challenges Report identified the ten top management challenges facing USDA. Of those challenges listed, OIG continues to consider the following five to be the most significant:

- Improving interagency communication, coordination, and program integration;
- Strengthening efforts to identify, report, and reduce improper payments;
- Improving controls for food safety inspection systems;
- Implementing strong, integrated internal control systems; and
- Implementing a secure information technology environment.

Mr. Aderholt: What USDA programs, functions or agencies are of most concern to you? Why?

Response: As an agency whose mission is to identify and eliminate fraud, waste, and abuse, any USDA program with identified weaknesses and vulnerabilities is of significant concern to OIG. However, as referenced in OIG's past semiannual reports to Congress and annual reports of management challenges facing USDA, the programs and functions of most concern are those relating to food safety and security, information technology security, and improper payments in agency programs. Our work has also shown that these programs would benefit from the implementation of strong, integrated internal control systems.

Below are some examples to address this and your previous question on USDA's top management and programmatic challenges.

Food Safety: We view food safety inspection to be a continuing concern because food-borne pathogens and food contamination can put consumer health in jeopardy. Our audits have recommended that the Food Safety Inspection Service (FSIS) continue to improve its inspection processes, management of

¹ The most current version of these reports may be viewed on USDA's Web site at http://www.ocfo.usda.gov/usdarpt/pdf/USDA_FY2013_AFR.pdf (USDA Agency Financial Report, FY 2013, starting on page 165) and <http://www.usda.gov/oig/webdocs/MgmtChallenges2013.pdf> (USDA Management Challenges, dated August 2013).

human capital resources, and management controls to accurately assess risk and effectively prevent contamination.

Information Technology (IT) Management and Security: IT management and security has been a longstanding concern for USDA. We recommended that the Office of the Chief Information Officer (OCIO) work in collaboration with USDA agencies to achieve an improved security posture. The degree to which USDA, as a whole, complies with FISMA and other security guidance is based on individual agency performance. If each agency is in compliance with the Department's policies, then USDA as a whole will be FISMA compliant and more secure. OCIO needs to develop internal control procedures and strengthen communication and coordination for project management. We also found that USDA's security over critical IT systems did not meet required standards, leaving the systems vulnerable. It is critical that the Department manage and protect the security, confidentiality, and integrity of its IT infrastructure and the information residing in its IT systems.

Improper Payment Rates for School Lunch and School Breakfast: In FY 2013, the Food and Nutrition Service (FNS) estimated the improper payment rates for these two programs to be 15.69 percent for School Lunch and 25.26 percent for School Breakfast. We currently have work in process to evaluate the methods that FNS is using to lower the error rates in both of these programs. Our investigative work in the National School Lunch Program (NSLP) during FY 2013 resulted in \$271,233 in monetary results. Our investigations often find that providers falsely inflate the number of meals provided in order to obtain more funding than they are eligible to receive.

Supplemental Nutrition Assistance Program (SNAP) Fraud-Recipient and Retailer Amounts: The cost of SNAP has risen 141 percent since FY 2007. Benefits issued in FY 2013 were over \$76 billion. FNS reports a 3.8 percent error rate in eligibility and benefit determinations. In response to audit work we completed in the past, FNS initiated a review to determine and document the feasibility of establishing a fraud rate for recipients (the agency had not done this before) and improve the basis for calculating the national trafficking rate by retailers. We also recommended that FNS should comprehensively strengthen its controls over SNAP retailers.

We currently have work in process to evaluate the controls in place to ensure the SNAP Quality Control error rate is accurate.

Last year our investigative work highlighted trafficking (trafficking is the exchange of benefits for cash or other means). This continues to be an issue, given the size of SNAP, with respect to USDA's overall budget. SNAP fraud (trafficking) is an area where we currently dedicate slightly more than half of our investigative resources. In order to uncover and prevent fraud, and protect public funds and the integrity of the program, we believe that a concentrated effort is needed by the States in dealing with the recipients who engage in SNAP trafficking identified by our investigations. OIG is working with FNS on an initiative to address both the retailers and recipients that we identify through our investigations as engaging in SNAP trafficking. OIG's SNAP Initiative is currently in Phase 1 and has realized success to date in combining the resources, ingenuity, and prosecutorial efforts of local, State, and Federal law enforcement partners with the common goal of preventing and prosecuting SNAP fraud. This multi-step approach encourages guidance and identification of SNAP fraud offenders on both the retailer and client side of trafficking. A vital aspect of the Initiative is

prevention, achieved through community outreach and media efforts educating citizens and retail owners on the Federal regulations concerning SNAP benefits.

Suspension and debarment (S&D): S&D tools protect not only USDA from nonresponsible persons, but the Government as a whole, by prohibiting suspended and debarred persons from participating in most Federal programs and doing business with the Federal government.

On a quarterly basis, OIG Investigations staff provides the Office of the Chief Financial Officer (OCFO) with a list of all indictments and convictions that occurred within that quarter. OCFO distributes the list to the various USDA agency S&D representatives. In a plan recently developed between OIG, OCFO, and the agency S&D representatives, if a USDA agency is interested in pursuing S&D after reviewing the OIG reports, it contacts the appropriate OIG region to obtain additional information. The following chart depicts the number of suspensions, debarments, and administrative sanctions resulting from our investigative work.

Individual/Business Administrative Sanctions by Agency - FY 2013						
	Debarments	Suspended Benefits	Services Withdrawn	Licenses Revoked	Letters of Warning	Total Sanctions by Agency
AMS				1	1	2
APHIS	26			1		27
FNS	14	248	4	168	1	435
FSIS				1		1
FSA	13	1	1		1	16
NRCS	1					1
RHS	4					4
RMA	15					15
Total	73	249	5	171	3	501

Eligibility for Loan Programs: Our Recovery Act work provided a number of recommendations to strengthen procedures for ensuring loans (e.g., housing, business) are made to eligible recipients. Recent work on loss claims associated with single family housing guaranteed loans shows that agency personnel should review loans more closely before paying loss claims to ensure the recipient was actually eligible for the loan received. We randomly selected 102 loss claims paid between March 17, 2009, and February 28, 2011. Given the results of our statistical sample of 102 loss claims, we project that the agency paid about \$87 million in loss claims that were at risk of improper payments due to questionable loan eligibility, and paid about \$254 million in loss claims for loans that were at risk of improper payments due to questionable lender servicing. We also project that, across the program, Rural Development (RD) overpaid \$6.28 million related to 6,607 claims submitted by lenders for loss reimbursement.

Crop Insurance: We continue to report weaknesses in the integrity and cost effectiveness of crop insurance payments (e.g., prevented planting provisions). Our recent audit work determined that Risk Management Agency (RMA) needs to improve the prevented planting provisions to be more cost effective; to encourage producers to plant a crop, where possible; and to

make eligibility criteria more objective and clear. By establishing coverage levels that provided over \$480 million in potentially excessive payments, we believe that RMA inadvertently provided incentives to actively encourage prevented planting claims. Also, we found that loss adjusters did not fully document and support eligibility for over \$43 million in prevented planting payments. Last year, our testimony highlighted large-scale crop insurance fraud in cases involving tobacco in North Carolina which led to seven other related investigations on tobacco producers. As of February 2014, the total results of all these investigations have led to 42 convictions, \$56.5 million in restitution, and \$2.1 million in forfeitures.

Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Program Integrity: In FY 2013, our investigative work involving WIC yielded 11 indictments, 20 convictions, and approximately \$2.4 million in monetary results. As of February 2014, 11 States have fully implemented and are utilizing EBT to redeem WIC benefits. OIG plans to work closely with FNS and those States to identify ways the use of EBT technology can assist in our investigations to ensure the integrity of the WIC Program.

Based on our investigative work, we have initiated an audit to evaluate food costs for the WIC program. We initiated this review to determine why certain program cost disparities exist among States, including average food costs and costs per participant.

Mr. Aderholt: During the hearing on March 5, 2014, Rep. Latham asked about information included in the OIG's most recent Semi-Annual Report on the 17 audits conducted by OIG during that period. Through these audits, OIG determined there were \$424 million in questioned and unsupported costs. More than \$12 million was recommended for recovery; \$412 million was not recommended for recovery. For the record, please explain questioned and unsupported costs and the difference between costs recommended and not recommended for recovery. Also, please explain how OIG identifies USDA expenditures that can be put to better use.

Response: You asked us to explain for the record questioned and unsupported costs and the difference between costs recommended/not recommended for recovery.²

Questioned cost means a cost that is questioned by OIG because of (a) an alleged violation of a provision of law, regulation, contract, grant, cooperative agreement, or other agreement or document governing the expenditure of funds; (b) a finding that, at the time of the audit, such cost is not supported by adequate documentation (known as unsupported costs), or (c) a finding that the expenditure of funds for the intended purpose is unnecessary or unreasonable. Recoverable questioned costs include amounts that the auditee agency has expended and for which OIG recommends recovery and expects a claim to be established.

Unsupported costs are also questioned costs; at the time of the audit, the expenditure of funds was not supported by adequate documentation or the auditee was unable to provide sufficient documentary evidence establishing allowability of the questioned cost.

² 5 U.S.C. app. 3, §5(f)(1)(2) and (4).

Questioned costs where recovery is not recommended include amounts that the auditee agency has expended and for which a recommendation for recovery is not feasible and/or appropriate. This would include amounts questioned due to improper agency action, which in some cases may be unrecoverable. Auditee inhouse expenses (salaries, etc.) and statistical projections are further examples of costs which, when questioned, may not be recoverable.

OIG also makes recommendations where identified funds could be put to better use - in other words, future funds could be used more efficiently if management implemented the recommendation. These include reductions in outlays; deobligation of funds from programs or operations; withdrawal of interest subsidy costs on loans or loan guarantees, insurance, or bonds; costs not incurred by implementing recommended improvements related to the operations of the establishment, a contractor, or grantee; avoidance of unnecessary expenditures noted in pre-award reviews of contract or grant agreements; and/or any other savings that are specifically identified during an audit review. Monetary amounts identified under funds that could be put to better use represent future savings from cost reductions, revenue increases, improved receivable collections, or more efficient fund usage.

Mr. Aderholt: Animal rights organizations often go "under cover" to reveal animal abuse occurring at processing facilities. Do animal rights organizations ever alert OIG of suspected animal welfare violations? Is OIG ever involved in these "under cover" investigations? When violations are found, does OIG get involved in these cases?

Response: OIG is sometimes notified directly by animal rights groups of suspected animal welfare violations. Additionally, OIG is notified when an animal rights group or other individual or entity contacts the FSIS and/or the USDA Office of the Secretary (OSEC). Those agencies refer the allegations to OIG to determine if there is evidence that could lead to a criminal prosecution. OIG has not worked with animal rights groups that have conducted their own "under cover" investigations, which led to referrals to the Department.

OIG has initiated investigations based on various referrals from animal rights groups when there appear to be criminal violations. A few recent examples involve the Hallmark investigation in California, which led to an OIG investigation resulting in a \$155 million civil settlement; an investigation in Vermont, which led to convictions and sentencing in 2010; and more recently a New Jersey plant, which we are currently working with FSIS to assess.

SNAP FRAUD DETECTION

Mr. Aderholt: Please update the information provided in the fiscal year 2014 hearing record regarding the OIG's evaluation of the Food and Nutrition Service's (FNS) monitoring of the controls States have in place to mitigate fraud in SNAP. FNS performed reviews to evaluate how states managed SNAP, but OIG identified deficiencies in how the agency and states were collecting and analyzing information to detect fraud.

Please provide any additional information about these audits and your recommendations to combat fraud in SNAP.

Response: Most of our audit recommendations have reached final agency action on these reports and the remaining final actions should be completed

in the near future. We recommended that FNS issue guidance telling States to use a comprehensive Social Security Administration (SSA) database to perform death matches, perform checks to make sure the information in the eligibility database is accurate, check the electronic disqualified recipient reporting system (eDRS) before providing benefits, identify and assess available electronic benefits transfer (EBT) management reports to determine which could be useful to State fraud detection efforts, assess fraud detection as part of the management evaluation process, and to develop tools to prevent duplicate accounts in the same State. FNS agreed with our recommendations. In addition, FNS is performing studies to develop a tool to prevent participation in surrounding States and determine the feasibility of developing a recipient fraud rate.

We also recently initiated an audit that would evaluate the effectiveness of tools used by different States to disqualify individuals from SNAP for committing fraud. However, during the entrance conference we learned that FNS had recently hired a contractor to perform similar work in this area; therefore, we cancelled the audit and are monitoring the progress of this effort. The contractor plans to review efforts in 3-5 States and provide those States with a comprehensive fraud prevention plan which could be used by all States.

Mr. Aderholt: Please provide a table that shows how much of OIG's budget is spent on monitoring SNAP to reflect fiscal years 2009 through 2013 and estimated for fiscal year 2014.

Response: The following tables reflect the cost of direct audit and investigation staff time spent on SNAP oversight during fiscal years 2009 through 2013. The estimate for fiscal year 2014 is a projection based on work being performed on SNAP. For fiscal years 2009-through the second quarter of 2013, these amounts include OIG oversight activities pursuant to the American Recovery and Reinvestment Act of 2009.

SNAP AUDITS		
Fiscal Year	Percent of Direct Audit Time Spent on SNAP Audits	Cost (in millions)
FY 2009 (actual)	0.13%	\$0.05
FY 2010 (actual)	5.89%	\$2.5
FY 2011 (actual)	4.56%	\$1.9
FY 2012 (actual)	8.82%	\$3.7
FY 2013 (actual)	9.01%	\$3.6
FY 2014 (estimated)	5.68% ³	\$2.4

³ This percentage is an average of FYs 2010 through 2013.

SNAP INVESTIGATIONS		
Fiscal Year	Percent of Direct Investigations Time Spent on SNAP Investigations	Cost (in millions)
FY 2009 (actual)	23.27%	\$10.2
FY 2010 (actual)	36.26%	\$16.3
FY 2011 (actual)	45.99%	\$20.7
FY 2012 (actual)	52.35%	\$22.8
FY 2013 (actual)	54.52%	\$22.8
FY 2014 (estimated)	58.00%	\$26.6

Mr. Aderholt: Please provide a table showing the number of SNAP-related cases that were investigated, the number referred to the Department of Justice, and the number accepted by the Department of Justice, for fiscal years 2010 through 2013.

Response: The information requested follows:

USDA OIG SNAP Referrals F 2010 through 2013			
	Cases Issued	Referred to DOJ	Accepted by DOJ
FY 2010	81	56	16
FY 2011	184	110	73
FY 2012	201	123	88
FY 2013	195	137	109
Total	661	426	286*

Mr. Aderholt: Please provide a table showing the number of SNAP-related cases that were successfully prosecuted for fiscal years 2010 through 2013.

Response: The information requested follows:

U.S. Department of Agriculture - Office of Inspector General SNAP
Investigations Successfully Prosecuted FYs 2010 through 2013

	Number of SNAP Cases Resulting in Convictions
FY 2010	68
FY 2011	82
FY 2012	141
FY 2013	149
Total	440*

*The period of time to obtain court action varies widely, therefore the 286 cases accepted by DOJ, does not necessary correlate to the 440 total number of cases resulting in convictions.

Mr. Aderholt: Please provide the Subcommittee with a description of your findings and recommendations in the review of state fraud detection units, FNS's response and what action FNS currently is taking to address this issue.

Response: OIG issued 12 audit reports recently that dealt with State fraud detection units. Eleven are comprised of 10 State level reports and one rollup report, while the 12th report involves Recovery Act SNAP dollars. We issued the 10 State reports between November 2011 and June 2012 for the States of Kansas, Florida, Louisiana, Alabama, Mississippi, Texas, Missouri, Massachusetts, New Jersey, and New York. We selected the 10 States based on high SNAP participation and dollars and the potential for interstate duplication of benefits. Our rollup report was issued in September 2012.

We recommended that FNS issue guidance telling States to use a comprehensive SSA database to perform death matches, perform checks to make sure the information in the eligibility database is accurate, check the eDRS before providing benefits, identify and assess available EBT management reports to determine which could be useful to State fraud detection efforts, assess fraud detection as part of the management evaluation process, and develop tools to prevent duplicate accounts in the same State. FNS agreed with these recommendations. In addition, FNS is performing studies to develop a tool to prevent participation in surrounding States and determine the feasibility of providing a recipient fraud rate. Finally, FNS hired a contractor to define a set of standard fraud detection and prevention tools for States.

Of the 40 recommendations issued in these 12 reports, there remain only 10 recommendations that the agency is still working to fully implement. They were initially planned to be completed by September 2013, but have been re-scheduled for completion by FNS in April 2014. FNS informed us that it plans to submit documentation to the Department to demonstrate that the remaining recommendations have been fully implemented.

Mr. Aderholt: The testimony provided for the hearing on March 5, 2014, briefly mentioned a new multi-agency approach to identifying and addressing SNAP fraud. It is called the SNAP Initiative.

Please describe the initiative.

Response: The SNAP Initiative was developed as a tool to further identify and address fraud in the SNAP program on a multi-agency level. The Initiative combines the resources, ingenuity, and prosecutorial efforts of local, State, and Federal law enforcement; as well as SNAP State partners, with the common goal of identifying, prosecuting, and preventing SNAP fraud. While OIG has successfully investigated and prosecuted retailers for SNAP fraud, we have found that States, who are responsible for addressing recipient fraud, may not take similarly aggressive action. OIG worked with FNS in order to create an initiative that would address both retailers and recipients. A vital aspect of the Initiative is prevention, achieved through community outreach and media efforts educating citizens and retail owners on the Federal regulations concerning SNAP benefits. OIG, working with FNS, identified three locations throughout the United States where we will conduct this initiative and have divided the initiative into three phases, based on the three locations. We are currently in Phase I of the Initiative.

Mr. Aderholt: How is it different from other efforts?

Response: This effort distinguishes itself because it will be a concerted effort with FNS to address retailer fraud. It also includes State and local partners, who will immediately take action against recipients after a retailer has been prosecuted. Additionally, it adds a prevention/education aspect. The prevention/education campaign, which for Phase I will be coordinated by the State, will be achieved through press releases, and will educate the public that SNAP fraud is illegal, and that SNAP trafficking will have consequences. This message should further reduce fraud and discourage citizens from abusing the SNAP program.

Mr. Aderholt: What is its estimated cost?

Response: OIG estimates that our total cost for conducting the SNAP Initiative will be approximately \$100,000, over FYs 14 through FY 16, in support of the operation for all three locations. This figure does not include salary and benefits for the special agents working on the Initiative.

Mr. Aderholt: How many staff will be assigned to it?

Response: We are currently on Phase I of the initiative, and are utilizing approximately five OIG special agents. We have additional assistance from FNS personnel and State investigators. It is too soon to determine whether additional resources will be required for Phases II and III, though we anticipate no less than the number currently being used in Phase I.

Mr. Aderholt: The Subcommittee has encouraged the OIG to expand its efforts to raise public awareness of successful investigations of fraud, particularly regarding SNAP.

What deterrent effect does increased reporting of successful prosecutions of fraud have on participants and retailers?

Response: OIG's goal is to prosecute retailers who engage in SNAP trafficking with the anticipation that our successful prosecutions, along with increased reporting and media attention, will deter others from engaging in SNAP trafficking. Additionally, it is anticipated that, when action is taken by the States against recipients and the action is made public, recipients will realize they risk losing their SNAP benefits permanently, which will serve as a further deterrent effect. OIG posts press releases from United States Attorney Offices (USAOs) and other prosecutors about significant investigative developments in OIG cases on our public internet home page. Notices about the developments are sent to media and external requestors, and OIG notifies Appropriations Committee staff.

Mr. Aderholt: Is FNS doing everything it should be doing to deter and prosecute fraud?

Response: We have found that FNS is making a strong effort to deter and prosecute fraud. FNS' Compliance Retailer Investigation Branch (RIB) conducts activities which lead to administrative sanctions against retailers or referrals to OIG for criminal prosecution. Additionally, FNS works closely with OIG to address and strengthen loopholes in the program, which we identify through our audit and investigative work. An example is the recent effort FNS is making to strengthen SNAP trafficking definitions.

Mr. Aderholt: Is FNS appropriately assisting States with their responsibilities and efforts to deter fraud?

Response: FNS has implemented a coordinated strategy with the various State organizational entities to deter fraud and improve program efficiency. For example, FNS utilizes the State Law Enforcement Bureau (SLEB) agreement, which authorizes State and local law enforcement to use EBT benefits for SNAP investigative purposes within the State. Additionally, the SNAP Initiative should foster a stronger working relationship between FNS and the States in order to detect, prevent, and deter fraud, especially with regard to addressing recipients who engage in SNAP trafficking with the retailers.

Mr. Aderholt: OIG has an 800-number hotline where individuals may report potential fraud. In fact, this Subcommittee directed the Food and Nutrition Service ensure the hotline number is printed on SNAP EBT cards as well as the WIC food instruments.

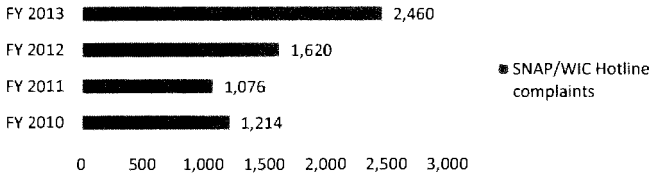
On average, how many calls and/or reports does OIG receive on SNAP and WIC fraud per month?

Response: Thus far in FY 2014, the OIG Hotline received, on average, 196 complaints per month related to SNAP and WIC fraud. In FY 2013, the Hotline received, on average, 205 complaints per month related to SNAP and WIC fraud. This information includes complaints received via phone, e-mail, fax, and mail.

Mr. Aderholt: Have you seen an increase in the number of hotline calls over the years?

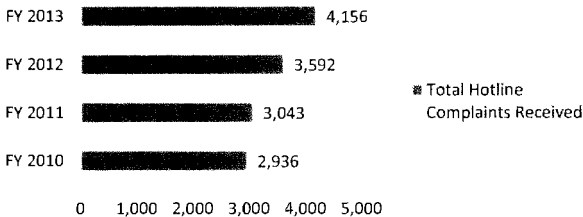
Response: Yes. From FY 2012 to FY 2013 alone, we had an increase of 840 hotline complaints related to SNAP/WIC. The increase from FY 2011 to FY 2012 was 544. The chart below shows the number of hotline complaints related to SNAP/WIC fraud:

SNAP/WIC Hotline complaints



It should be noted that we receive hotline complaints on all USDA programs, including SNAP/WIC. The total number of complaints (including SNAP/WIC) is as follows:

Total Hotline Complaints Received



Mr. Aderholt: Has this been a valuable tool for combatting fraud and abuse in SNAP and WIC?

Response: Yes, we find the OIG Hotline is a valuable tool for individuals to report allegations of fraud, waste, and abuse. A large percentage of our contacts involve allegations of SNAP recipient fraud. We forward information obtained from these complainants directly to FNS, which refers it to the appropriate State entity for investigation and action. Additionally, most States have contact numbers where nutrition assistance fraud can be reported directly to the State.

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS AND CHILDREN (WIC)

Mr. Aderholt: States are required by the Healthy, Hunger-Free Kids Act of 2010 to establish a system that allows for electronic disbursement of WIC benefits by 2020. Based upon your observations and experience with SNAP electronic benefit transfer (EBT), what benefits, especially in regards to fraud reduction, can be achieved by transitioning WIC to EBT?

Response: We have found that EBT does not necessarily reduce fraud; however, the technology does allow OIG to more accurately and efficiently

identify and document trafficking. We see the same benefits for the use of EBT in the WIC Program, as well as the potential for improved delivery of benefits to the clients. With EBT systems, benefits are transacted electronically, providing access to information on every transaction between recipient and vendor. Transitioning WIC paper vouchers to EBT allows investigative personnel to review large volumes of redemption data, captured from participating WIC vendors, in a short period of time. An examination of the data, coupled with historical information on the vendor, gives us, as well as the prosecutor, the ability to make an informed decision on whether or not to prosecute a matter, or allow FNS to pursue administrative action.

We noted during our FY 2013 work at the Michigan State Agency for the WIC Vendor Management Audit (27601-0038-CH, issued March 29, 2013), which was the only State Agency that we reviewed that was using EBT for WIC, that reciprocal disqualification of vendors from SNAP and WIC would happen simultaneously when the point-of-sale (POS) device was removed from the store. It is important to note that Michigan vendors are required to be SNAP vendors before they can be WIC vendors. The WIC EBT cards in Michigan use the same POS device that the SNAP EBT card uses. When a vendor is disqualified from SNAP, the POS device is removed. Therefore, the vendor cannot redeem WIC EBT cards anymore. In this case, use of EBT for WIC can help the WIC State Agency increase compliance with the regulatory requirement to disqualify SNAP-disqualified vendors.

Mr. Aderholt: The Subcommittee is aware that some states are facing possible penalties because they have not been properly managing their WIC-approved vendors. Does OIG plan to review how States manage their WIC vendors?

Response: We released an audit of WIC vendors last year. Currently, we do not have further audit work planned to review how States manage their WIC vendors. However, we will consider a follow up audit after our recommendations from last year's report are implemented.

Mr. Aderholt: Recent news articles have described the sale of WIC-purchased infant formula and other foods through social media websites. Is the OIG looking into this type of fraudulent activities? What, if anything, is FNS doing to combat this type of fraud?

Response: OIG carefully evaluates all allegations of fraud, but typically does not investigate trafficking through social media websites. FNS has established relationships with social media websites, and requests their assistance in the prevention of fraud. When it becomes aware of these types of activities, FNS works with the host social media website to ensure the posting is immediately removed. FNS also provided States with technical assistance for monitoring social media websites, such as Craig's List, for attempts to buy or sell benefits. Additionally, FNS is working towards finalizing a rule to clarify existing policy regarding the intent to buy or sell SNAP and/or WIC benefits, in public or online, through the use of social media websites, and to further define it as a program violation.

CROP INSURANCE

Mr. Aderholt: Last year, OIG reviewed the Risk Management Agency's (RMA) prevented planting provisions. The agency found that RMA's decisions

allowed for \$480 million in potentially excessive payments, and that it was providing incentives to producers to file prevented planting claims.

According to your report, RMA generally agreed with your assessment. Please describe the changes that needed to be made.

Response: In our report (Audit Report 05601-0001-31, *RMA: Controls Over Prevented Planting*, issued September 2013), we recommended that RMA needed to re-evaluate coverage levels provided for preventing planting, and make any necessary changes to reduce program costs, where possible. In its response, dated August 12, 2013, RMA stated that it awarded a Prevented Planting Evaluation (PPE) contract to determine if prevented planting payments are appropriate when a producer is prevented from planting a crop, but not excessive to the extent that the coverage encourages producers not to plant. RMA also stated that any changes deemed necessary to reflect appropriate prevented planting payments will be determined by June 30, 2014, in order to be effective for the 2015 crop year. RMA also agreed to periodically reevaluate the coverage levels to ensure that the levels remain in appropriate and consistent relationship with preplanting costs, and stated that one of the deliverables under the PPE contract was to provide a methodology that would allow RMA to periodically reevaluate the coverage levels. RMA also agreed to establish an appropriate schedule to reevaluate these coverage levels.

Mr. Aderholt: What is OIG's overall assessment of the crop insurance program? Does it have sufficient safeguards against fraud and abuse?

Response: We issued a report in 2009 (Audit Report 05601-11-At, *Risk Management Agency Compliance Activities*, issued September 2009) that made a number of recommendations to RMA to strengthen its overall compliance and monitoring activities to improve program effectiveness and integrity in the Federal crop insurance program, which has become the major risk management tool available to American producers. We recommended that RMA develop a comprehensive, systematic, and well-defined strategy for compliance efforts; conduct and document an overall risk assessment of program operations; develop outcome-based performance measures to better measure the agency's effectiveness; and develop and implement a new method for calculating RMA's improper payment error rate that meets the requirements of the Improper Payment Information Act. We believe that RMA has made strides to strengthen these areas, but some of our recent reports point out the need for continued efforts to strengthen its compliance and monitoring efforts. For example, our prevented planting report (Audit Report 05601-0001-31, *RMA: Controls Over Prevented Planting*, issued September 2013) found that loss adjusters did not document and support a required determination of prevented planting eligibility. In response to our recommendations, RMA agreed to strengthen its crop insurance provisions and to reiterate the need for loss adjusters to obtain and maintain supporting documentation. We also recommended that RMA emphasize that any effective quality control reviews by the approved insurance providers must include independent verification of data and information provided by producers. We believe that an effective quality control review system that includes independent verification of data will help to mitigate potential fraud and abuse.

Recently, RMA, under the guidance of the Office of Management and Budget (OMB), has reached out to OIG for assistance and feedback as RMA develops and implements a more effective and accurate improper payment error rate methodology. With this more effective and accurate tool, we believe that RMA

will be better able to identify and analyze systemic weaknesses contributing to any improper payments.

Mr. Aderholt: What work does OIG have planned on the program?

Response: OIG has two ongoing reviews involving the Federal crop insurance program. These include the following:

Audit Number	Audit Title	Audit Objectives
05601-0002-22	Risk Management Agency National Program Operations Reviews	The overall objective is to assess whether RMA's National Program Operations Reviews (NPOR) reasonably determine if the approved insurance providers are substantially in compliance with laws, regulations, the Standard Reinsurance Agreement, associated appendices, and approved Federal Crop Insurance Corporation (FCIC) policies and procedures. Also, to assess if the NPORs provide an accurate and effective basis to determine RMA's improper payment rate.
05601-0002-31	FCIC - Enterprise Units	The objective is to evaluate the effectiveness of the design and execution of enterprise units with the Federal Crop Insurance Program. Specifically, we will also examine the relative premium subsidies, review vulnerabilities that may increase the potential for program abuse, and perform additional tests on policies, procedures, and data related to enterprise units.

FARMER DISCRIMINATION COMPLAINTS

Mr. Aderholt: Please update the Subcommittee on OIG's audit of the processes used and determinations made by the claims administrator and adjudicators for the female, Hispanic, Native American, and African American discrimination claims resolution processes.

Response: With respect to *In re Black Farmers Discrimination Litigation* (BFDL), involving claims filed by African American farmers, the Claims Resolution Act of 2010 requires USDA OIG to conduct a performance audit based on a statistical sample of adjudicated claims. Based on this requirement, OIG conducted a performance audit of the BFDL claims review process (Audit Report 50601-0001-21, *In re Black Farmers Discrimination Litigation*, issued December 2013)⁴ to evaluate the integrity and consistency of the processes applied to claimants. During this audit, OIG reviewed a statistical sample of provisionally adjudicated claims because Class Counsel

⁴ A summary of this audit's results is presented in response to question 28 below.

stated all claims would be adjudicated in late summer to early fall of 2012. However, final decisions were delayed until July or August 2013, so OIG was not able to audit adjudicated claims.

We are currently conducting a follow-up audit (50601-0003-21) of the completed BFDL claims process to determine if awards were granted to eligible claimants. This audit will include reviewing a statistical sample of adjudicated claims. In total, the Claims Administrator received over 40,000 claims, and 18,409 Track A claims were approved for awards. No Track B claims were approved for awards.

There is no such statutory requirement for an audit similar to BFDL with regard to the claims resolution process involving Hispanic or women farmers. However, at the request of the Secretary, we are currently conducting an audit of the *Hispanic and Women Farmers and Ranchers Claims Resolution Process* (50601-0002-21). The objective of this audit is to determine if the claims review process is adequate and functioning as prescribed, and to ensure that funds are distributed only to eligible applicants.

There is no such statutory requirement for an audit similar to BFDL with regard to *Keepseagle v. Vilsack*, a Native American farmer lawsuit, which was settled in 2010 for \$760 million. Payments under this settlement started being made to claimants in August 2012.

Mr. Aderholt: What is the status of OIG's audits?

Response: We issued a report on the BFDL claims review process (50601-0001-21), in December 2013.

We are currently conducting a follow-up audit (50601-0003-21) of the completed BFDL claims process to determine if awards were granted to eligible claimants. This audit will include reviewing a statistical sample of adjudicated claims.

At the request of the Secretary, we are currently conducting an audit of the *Hispanic and Women Farmers and Ranchers Claims Resolution Process* (50601-0002-21). The objective of this audit is to determine if the claims review process is adequate and functioning as prescribed, and to ensure that funds are distributed only to eligible applicants.

Mr. Aderholt: Has OIG made any recommendations? If so, please describe them for the record.

Response: Our initial audit of the BFDL settlement process (50601-0001-21, issued December 2013) concluded that the process was generally adequate. However, we identified three issues the Claims Administrator (CA) and the Neutral needed to address prior to awarding payments. First, we found that for some claims, the Neutral's adjudicators reached different conclusions for claims that essentially contained the same types of information, approving some and denying others. Second, the CA had not identified all instances where multiple claims may have been filed for single farming operations or individual class members. Third, although participants in the *Pigford* settlement were prohibited from participating in the BFDL settlement, we found that the Neutral provisionally approved persons who participated in *Pigford*. We did not make any formal recommendations during this audit. The CA and the Neutral both implemented actions to address the issues identified in our audit prior to making award payments.

USDA INFORMATION TECHNOLOGY (IT) SECURITY

Mr. Aderholt: In testimony and reports, OIG has identified and made recommendations on longstanding weaknesses in USDA's information technology security.

Please describe OIG's recent, current and future plans regarding USDA's IT concerns.

Response: In February 2014, we issued a report on the National Agricultural Statistics Service's (NASS) Lockup procedures (Audit Report 26501-0001-12, *Security Review of National Agricultural Statistics Service's Lockup Procedures*). This review identified several IT security concerns. We found that NASS did not adequately enforce critical IT security procedures, had not implemented adequate physical security measures to protect the security of its information, and was not mitigating outstanding IT vulnerabilities in a timely manner. In our FY 2013 FISMA report (Audit Report 50501-0004-12, *U.S. Department of Agriculture, Office of the Chief Information Officer, Fiscal Year 2013 Federal Information Security Management Act (FISMA)*, issued November 2013), we continued to report a material weakness in USDA's IT security. We found (1) the Department has not developed policies, procedures, or strategies for continuous monitoring or risk management; (2) the Department and its agencies are not in compliance with baseline configurations; (3) vulnerabilities are not being remediated in a timely manner; (4) separated employees' access to computer systems is not terminated in a timely manner; (5) policies defining the detection and removal of unauthorized network connections have not been developed or implemented; and (6) policies have not been issued defining required oversight of information technology systems that contractors or other entities operate on USDA's behalf, including systems and services residing in the cloud.

We have several ongoing audits that further address IT concerns: *Management and Security over USDA's Universal Telecommunications Networks*, the *Council of the Inspectors General on Integrity and Efficiency (CIGIE) Cloud Computing Initiative - Status of the Cloud Computing Environment within USDA*, *Farm Service Agency's Initiative to Modernize and Innovate the Delivery of Agricultural Systems (MIDAS)*, and the FY 2014 FISMA audit. In the FY 2014 FISMA audit, we plan to also review select controls over two RD systems, in addition to following up on our prior audit recommendations.

Mr. Aderholt: Where should USDA's Office of the Chief Information Officer focus its efforts?

Response: In the FY 2013 FISMA report (50501-0004-12, issued November 2013), we stated that OCIO needs to continue its efforts in updating and issuing policies; this is the first step to improving IT security within USDA. To be successful, it is critical that USDA agencies create and implement agency-specific procedures based on Departmental policy, and that OCIO then follow-up with reviews of each agencies' compliance with OCIO policy.

Mr. Aderholt: What management changes need to be made across the Department to ensure security?

Response: The Department needs to collaborate with the agencies and develop an overall plan to mitigate the material weaknesses. They must have

agency buy-in and the project plan must be priority based. For example, one of the consistently poor performing areas we audit involves the need for agencies (including OCIO) to patch their systems for known vulnerabilities. This is a continuing problem that the Department and all agencies need to resolve.

In FYs 2010, 2011, and 2012, USDA has had the worst cybersecurity score of all of the large departments. The scorecard for fiscal year 2013 has not been released yet.

Mr. Aderholt: Has USDA improved?

Response: In FY 2013 OIG found that, although USDA continues to improve the security posture of its, IT infrastructure and associated data, many longstanding weaknesses remain. In FYs 2009 through 2012, OIG made 49 recommendations for improving the overall security of USDA's systems, but only 20 of these have been implemented. We noted that OCIO is taking positive steps to improve its security posture into the future. For example, OCIO released three key Departmentwide policies in the latter part of FY 2013 and the beginning of FY 2014. However, it is now critical that agencies create and implement agency-specific procedures based on Departmental policy. OCIO then needs to review the agencies' implemented procedures to ensure compliance with USDA policy. Once this process is institutionalized throughout USDA, its security posture will improve and be sustainable into the future.

Mr. Aderholt: What are the most problematic areas?

Response: In FYs 2009 through 2012, OIG made 49 recommendations for improving the overall security of USDA's systems, but only 20 of these have been closed. In addition, OIG made six recommendations in FY 2013 and we are currently in the process of reaching management decision on four of the six recommendations. These 55 recommendations include issues with continuous monitoring, risk management, oversight of contractor systems, cloud services, incident reporting, and the lack of compliance with OMB, National Institute of Standards and Technology (NIST), and Departmental guidance.

Mr. Aderholt: Does Congress need to consider legislative changes to help USDA address this problem?

Response: Before considering legislative changes, the Department and its agencies need to implement current OMB, NIST, and Departmental guidance.

Mr. Aderholt: USDA provides funding for many grants, loans and assistance to American families and individuals. In order to receive assistance, these families and individuals must provide Personally Identifiable Information.

Is USDA sufficiently protecting Personally Identifiable Information?

Response: We found during the course of a number of audits that USDA and its agencies have not effectively implemented required security guidance issued by OMB, NIST, and the Department. As a result, USDA systems have an increased risk of sensitive and personally identifiable information (PII) information being lost, disclosed, altered, or destroyed.

Mr. Aderholt: Is this information safe from cyber criminals?

Response: As indicated in our prior response, we found during the course of a number of audits that USDA and its agencies have not effectively implemented required security guidance. As a result, USDA systems are at risk of being accessed and compromised by outside entities, including cyber criminals.

Mr. Aderholt: USDA also has a good deal of secret and sensitive non-personally identifiable information, such as information on plant and animal disease research.

What is OIG's assessment of USDA's cybersecurity on this type of data?

Response: Until USDA improves its security posture for its information systems and the information residing on these systems, including PII and non-PII sensitive information, there is an increased risk of data being lost, disclosed, altered, and/or destroyed. In our FY 2013 FISMA report (50501-0004-12), we continued to report a material weakness in USDA's IT security. We found: (1) the Department has not developed policies, procedures, or strategies for continuous monitoring or risk management; (2) the Department and its agencies are not in compliance with baseline configurations; (3) vulnerabilities are not being remediated in a timely manner; (4) separated employees' access to computer systems is not terminated in a timely manner; (5) policies defining the detection and removal of unauthorized network connections have not been developed or implemented; and (6) policies have not been issued defining required oversight of information technology systems that contractors or other entities operate on USDA's behalf, including systems and services residing in the cloud.

Mr. Aderholt: Does it have appropriate safeguards in place to ensure only those allowed to access this information are able to?

Response: Currently, USDA does not have sufficient safeguards in place to ensure that its information is accessed by only those people requiring access. We continue to find that users that have left USDA still have access to its systems, and that some users have a higher level of access than required to perform their job.

Mr. Aderholt: In the November 2012 report on USDA's cloud computing plans, OIG states, "Based upon testing of USDA's cloud provider's traffic, discussions with USDA IT personnel, and our review of the cloud provider Service Agreement and Incident Plan, we also determined that the Department is not capable of managing risks in a virtual/cloud environment."

Please update the Committee on OIG's work on USDA's cloud computing arrangements.

Response: We are currently conducting an audit of USDA's cloud computing contracts and plan to review the Service Level Agreements as part of our work. The objectives are to evaluate each selected agency's efforts to adopt cloud-computing technologies and to review executed contracts between agencies and cloud service providers for compliance with applicable standards. This audit is being conducted in conjunction with a Governmentwide initiative by CIGIE.

Mr. Aderholt: What are some of the risks to USDA IT Security with the current cloud computing arrangement?

Response: In the FY 2012 FISMA audit (50501-0003-12, issued November 2012), we recommended that USDA modify the service level agreement between the Department and the e-mail cloud service provider to incorporate appropriate detail, outlining the roles and responsibilities of each party pertaining to incident response and reporting and to gain visibility into USDA's email system (i.e., so that the Department can view/monitor network traffic in the cloud system). A new Federal initiative, Federal Risk and Authorization Management Program (FedRAMP), requires agencies and cloud service providers to stipulate any specific incident reporting requirements, including how to notify the agency and who to notify.⁵ USDA's current cloud service providers are required to become FedRAMP compliant by June 2014. However, when the cloud e-mail services contract was renegotiated and signed on September 30, 2013, we found that OCIO did not take advantage of its contract renegotiation period to include these requirements. OCIO did not include incident response and reporting responsibilities detailed in FedRAMP guidance, incorporate our recommendation to add adequate detail to address incident reporting roles and responsibilities, or include monitoring requirements to help safeguard USDA systems.

Mr. Aderholt: Based upon this statement and others in the report, should USDA move forward with additional plans to expand cloud computing?

Response: OMB's 'cloud-first' policy requires that agencies default to cloud-based solutions whenever a secure, reliable, cost-effective cloud option exists when evaluating options for new IT deployments. Cloud computing environments can be a viable option for USDA, if implemented with proper security. USDA must ensure the cloud contractor is FedRAMP compliant. In addition, the Department must ensure Service Level Agreements (SLA) are detailed and include functions and requirements that are in the best interest of the Department. The SLA must have clearly defined roles and responsibilities, and defined recourses for non-compliance.

AGRICULTURAL MARKETING SERVICE AND BEEF PROMOTION AND RESEARCH BOARD ACTIVITIES

Mr. Aderholt: OIG released an audit of the Beef Promotion and Research Board Activities in early 2013. Subsequently, OIG was asked by an outside party to correct errors and to review the findings of the audit.

Please summarize the findings from OIG's initial and follow up audits.

Response: In our initial March 29, 2013, report, we determined that the relationships between the Cattlemen's Beef Promotion and Research Board (beef board) and other industry-related organizations, including the beef board's primary contractor, the National Cattlemen's Beef Association (NCBA), complied with legislation. We also determined that the Agricultural Marketing Service (AMS) needs to strengthen its procedures for providing oversight to the Beef Research and Promotion Program. As part of our audit, we determined that assessed funds were collected, distributed, and expended in accordance with legislation. *(Please note that this was later determined to be an overstatement of the work performed and is discussed in the next few*

⁵ FedRAMP is a government-wide program that provides a standardized approach to security assessment, authorization, and continuous monitoring for cloud products and services.

paragraphs.) However, we found that AMS had not previously made these determinations itself, because AMS had not conducted periodic management reviews of the beef board, and the agency's procedures for conducting these reviews could be improved. Our audit also addressed concerns and specific allegations that beef checkoff funds may have been misused. We found no evidence to support that the board's activities in those areas did not comply with legislation and AMS guidelines and policies.

In our follow up January 28, 2014, audit, we determined that AMS needs to strengthen its procedures for providing oversight to the Beef Promotion and Research Program. We also found there was no cause to question, as it pertains to compliance with the Beef Research and Information Act, as amended (Act), and the Beef Promotion and Research Order (Order), the contractual relationships between the beef board and other industry-related organizations, including the NCBA. Overall, we concluded that AMS' oversight as an internal control function needs improvement. In our view, this resulted in agency officials having reduced assurance that beef checkoff funds were collected, distributed, and expended in accordance with the Act and the Order. We found that AMS had not conducted periodic management reviews of the beef board, and the agency's procedures for conducting these reviews could be improved. Our audit also addressed three specific allegations directed towards the beef board and NCBA. Overall, we concluded that the beef board, NCBA, and AMS, as applicable, took appropriate action regarding the matters, or that there was no impropriety related to the allegation.

We issued the January 28, 2014, report in response to an April 2013 complaint that questioned the quality of the March 29, 2013, report. We processed the complaint under OIG Information Quality Guidelines, implementing the Data Quality Act (Section 515 of Public Law 106-554). In order to accurately assess the quality, objectivity, utility, and integrity of the information presented in our report, and to determine if modifications to the report were warranted, we conducted a review of the audit engagement and report. As a result of this review, OIG identified issues pertaining to the execution of the March 29, 2013, audit. For example, the audit team did not perform all necessary procedures related to the statistical sampling plan. As a result, we could not determine that all funds were collected, distributed, and expended in accordance with the Act and the Order. In the March 29, 2013, report previously posted on our website, OIG stated that we determined that all funds were collected, distributed, and expended in accordance with the Act and Order. OIG also found that certain aspects of our quality control system were not fully completed. For example, OIG procedures relative to our quality control system require that a report be cross-referenced to sufficient, appropriate evidence. OIG's practice is to then subject all cross-referenced reports to a verification referencing review process. Due to an oversight, OIG did not perform a referencing review on the final report before the March 29, 2013, issuance date; although the previously approved draft versions of the report had been subject to our referencing process. Consequently, we re-engaged with AMS and conducted additional audit and quality control procedures from July through September 2013, to assess the finding and recommendations in the March 29, 2013, report. As a result of these procedures, we reaffirmed the finding and recommendations in the March 29, 2013, report. The conclusions reached by the re-engagement team on internal controls over expenditures as a result of the review were consistent with those reported in Finding 1 of the March 29, 2013, report, related to improving AMS' oversight of beef board expenditures reimbursed to NCBA, U.S. Meat Export Federation, and the American National Cattlewomen.

Mr. Aderholt: Has OIG taken any corrective action to ensure similar errors are not made in the future? Please describe any changes OIG has taken.

Response: OIG recognizes the importance of the quality control issues pertaining to the March 29, 2013, audit and has taken a number of actions to ensure similar errors are not made in the future. Shortly after identifying the control issues, Audit senior leadership met with the audit team to discuss why the quality control system failed and developed an action plan. During the summer of 2013, audit senior management communicated the importance of improvements in audit documentation, compliance with audit documentation requirements and guidelines, and cross-referencing and the related referencing review process. Specifically, we discussed these topics at the July 2013 planning meeting with all audit directors and at the professional development meetings with all audit staff held during August and September 2013. Further, we continued to remind staff of our improvements to the quality control system during regular teleconferences and meetings. In February 2014, the Assistant Inspector General for Audit issued a notice to all audit staff, reminding and emphasizing our commitment and enhancement to our system of quality control. We are also revising our directive on referencing reviews to reflect this emphasis, and will be providing training to all Audit staff in FY 2014.

OIG AUDITS, INVESTIGATIONS AND GENERAL INFORMATION REQUESTS

Mr. Aderholt: Please update the table from the fiscal year 2014 questions for the record (QFR) showing the financial statement audits OIG contracts for and those conducted in-house, as well as the cost of each audit for fiscal years 2009 through 2013.

Response: The following is the updated table showing the financial statement audits OIG contracts for and those conducted in-house, as well as the cost of each audit for fiscal years 2009 through 2013.

Audited Agency	Method of Performance	FY 2009 Actual Cost	FY 2010 Actual Cost	FY 2011 Actual Cost	FY 2012 Actual Cost	FY 2013 Actual Cost
Federal Crop Insurance Corporation	Contract	\$395,450	\$394,440	\$416,235	\$342,501	\$313,003
Commodity Credit Corporation	Contract	1,792,026	1,743,048	1,872,158	1,910,229	1,935,520
Forest Service*	Contract*	4,693,609	3,841,684	3,085,377	2,562,566	2,644,743
Food Nutrition Service	In-House	1,464,347	1,000,722	1,097,324	1,129,030	1,063,129
RD	In-House	1,816,359	2,148,758	2,368,598	1,723,854	1,513,150
Natural Resources Conservation Service	Contract	2,067,191	1,893,442	2,291,408	1,675,767	1,475,407
USDA Consolidated	In-House	2,155,387	1,962,294	2,089,368	2,184,386	1,909,983

*Beginning in FY 2014, the Forest Service financial statement audit will be incorporated into the USDA Consolidated Financial Statement Audit.

Mr. Aderholt: Please update the table from the fiscal year 2014 QFRs showing the amount of funds expended for public accountants hired under contract for fiscal years 2009 through 2013.

Response: The following is an updated table showing the amount of funds expended for public accountants hired under contract for fiscal years 2009 through 2013.

Audited Agency	Method of Performance	FY 2009 Actual Cost	FY 2010 Actual Cost	FY 2011 Actual Cost	FY 2012 Actual Cost	FY 2013 Actual Cost
Federal Crop Insurance Corporation	Contract	\$359,648	\$370,138	\$380,942	\$297,162	277,594
Commodity Credit Corporation	Contract	1,746,126	1,701,148	1,823,830	1,855,111	1,898,000
Forest Service**	Contract**	4,637,611	3,803,974	3,036,186	2,535,007	2,608,884
RD*	In-House	909,762	864,461	890,400	253,079	238,157
Natural Resources Conservation Service	Contract	2,018,537	1,868,302	2,248,258	1,607,314	1,440,349

* The audit is performed by OIG; however, credit reform review is performed by an Independent Public Accounting firm under contract.

** Beginning in FY 2014, the Forest Service financial statement audit will be incorporated into the USDA Consolidated Financial Statement Audit.

Mr. Aderholt: What was OIG's cost of performing audits of Commodity Credit Corporation (CCC) financial statements in fiscal year 2013? What was the reimbursement from CCC?

Response: CCC's financial statement audit is contracted out. However, OIG monitors the audit in accordance with *GAO/PCIE Financial Audit Manual*, Section 650 to ensure that the audit is performed by an audit firm that is independent, objective, and possesses the required qualifications. This monitoring also ensures that the audit is performed in accordance with generally accepted auditing standards in the United States. OIG's cost of performing the monitoring for FY 2013 was \$37,520. OIG did not receive reimbursement from CCC for this service. CCC paid the contractor cost of \$1,898,000 for FY 2013.

Mr. Aderholt: Please provide a list of all USDA financial statements OIG audits along with the opinions you provided on those financial statements. Include a brief description of each audit opinion and the reasons these opinions were rendered.

Response: There were seven financial statement audits performed by OIG on USDA agencies for FY 2013. The USDA Consolidated, RD, CCC, Forest Service (FS), FNS, and RMA/Federal Crop Insurance Corporation (FCIC) Financial Statement audit reports disclosed that the financial statements were presented fairly and conformed to generally accepted accounting principles, resulting in

unmodified opinions for FY 2013 and FY 2012. The Natural Resources Conservation Service's (NRCS) last five Financial Statement audits (FYs 2009, 2010, 2011, 2012, and 2013) resulted in a disclaimer of opinion; however, the errors were determined not to be material to the USDA consolidated financial statements, taken as a whole.

The NRCS disclaimer of opinion was the result of NRCS management's inability to provide sufficient evidentiary matter in support of transactions and account balances, as presented in the NRCS consolidated financial statements as of and for the year ended September 30, 2013; as well as NRCS' inability to complete corrective actions and make necessary adjustments to these and other financial statement amounts prior to the contractually required completion date. In addition, the independent public accountant, KPMG LLP, identified five deficiencies. Specifically, KPMG identified weaknesses in NRCS' undelivered orders; financial reporting; expenses; revenue and accounts receivable; and property, plant and equipment. The first four deficiencies were considered to be material weaknesses and the last one to be a significant deficiency.

Mr. Aderholt: Please update the status report included in the fiscal year 2014 QFRs on all current findings of material weakness since 2008. Specifically, please list the finding, OIG's recommendation and the current status.

Response: The following is an updated status report included in the fiscal year 2014 QFRs on all current findings of material weakness since 2008.

FY 2008 through FY 2013 Material Weaknesses Findings and Recommendations	Status (Reached Management Decision)
FY 2008 Consolidated Financial Statements Audit, Assignment No. 50401-65-FM	
Finding 1: Improvements are needed in overall financial management. Recommendation: Provide additional oversight to ensure that general ledgers reflect valid obligations and that agencies perform the required reviews timely and effectively.	Yes
Finding 2: Improvements are needed in Information Technology, Security and Controls. Recommendation: The Department and its agencies are in the process of addressing the weaknesses; therefore, no recommendations were made in the report.	N/A
FY 2009 Consolidated Financial Statements Audit, Assignment No. 50401-67-FM	
Finding 1: Improvements are needed in overall financial management. Recommendation: Provide additional oversight to ensure agencies (1) properly monitor and review obligation balances, (2) provide valid certifications based on complete and accurate reviews as required by Departmental Regulation 2230-001, and (3) understand the importance of responding to requests for bills or additional information in a timely manner.	Yes
Finding 2: Improvements are needed in Information Technology, Security and Controls. Recommendation: (1) Create a plan of action and milestones to correct deficiencies in both System Security Plans and Contingency and Disaster Recovery Plans, (2) revise Cyber Security Assessment and Management and/or system documentation	Yes

FY 2008 through FY 2013 Material Weaknesses Findings and Recommendations	Status (Reached Management Decision)
to reflect consistent and accurate information, and (3) institute policy and procedures to ensure review and signature of all parties bound by Interconnection Security Agreements.	
FY 2010 Consolidated Financial Statements Audit, Assignment No. 50401-70-FM	
Finding 1: Improvements are needed in overall financial management. Recommendation: Provide additional oversight to ensure that agencies are properly reviewing, researching, and timely implementing action to correct abnormal balances.	Yes
Finding 2: Improvements are needed in Information Technology, Security and Controls. Recommendation: Because of actions planned by the Department and recommendations made in other audits, no recommendation was made.	N/A
FY 2011 Consolidated Financial Statements Audit, Assignment No. 50401-01-11	
Finding 1: Improvements are needed in overall financial management. Recommendation: (1) Provide additional oversight of the accounting functions at FAS to ensure that the objectives of the internal control over financial reporting are maintained, and (2) provide additional oversight and training to ensure agencies are following Departmental policy in identifying and reconciling intradepartmental transactions.	Yes
Finding 2: Improvements are needed in Information Technology Security and Controls. Recommendation: Because of recommendations made in our annual FISMA audits, we are making no further recommendations.	N/A
FY 2012 Consolidated Financial Statements Audit, Assignment No. 50401-03-11	
Finding 1: Improvements are needed in overall financial management. Recommendation: Because of recommendations already made to CCC and NRCS in other reports, we are making no further recommendations in this report.	N/A
Finding 2: Improvements are needed in Information Technology Security and Controls. Recommendation: Because of recommendations made in our annual FISMA audits, we are making no further recommendations.	N/A
FY 2013 Consolidated Financial Statements Audit, Assignment No. 50401-05-11	
Finding 1: Improvements are needed in overall financial management. Recommendation: Because of recommendations already made to NRCS, CCC, and FCIC in other reports, we are making no further recommendations in this report.	N/A
Finding 2: Improvements are needed in overall Information Technology Security Program. Recommendation: Because of recommendations made in our prior FISMA audits, we are making no further recommendations.	N/A
FY 2008 CCC Financial Statements Audit, Assignment No. 06401-23-FM	

FY 2008 through FY 2013 Material Weaknesses Findings and Recommendations	Status (Reached Management Decision)
Finding 1: Improvements needed in Financial System Functionality and Fund Control. Recommendation: CCC is addressing the weakness; therefore, no recommendations were made in the report.	N/A
Finding 2: Improvements needed in management's review procedures over its cash flow models. Recommendation: The Office of Budget and Finance (OBF) should perform a more thorough and in-depth review of the models prior to submitting them for auditor review. In addition, OBF should begin making any necessary revisions to the model earlier in the fiscal year.	Yes
Finding 3: Improvements needed in management's analysis of obligations and liabilities for the Direct and Countercyclical Payment Programs. Recommendation: The formalized policies and procedures specific to the Countercyclical Payment and Direct Payment program specifically describe: (i) a process to perform a reasonableness analysis on the prior program year accruals and obligations carried forward to the current period; (ii) actions that should be taken based on this analysis; and (iii) procedures that should be followed to update the recorded amounts based on information that comes to management's attention subsequent to fiscal year end that is relevant to current year recorded amounts.	Yes
FY 2009 CCC Financial Statements Audit, Assignment No. 06401-24-FM	
Finding 1: Improvements are needed in financial management system's functionality. Recommendation: Because of actions planned by the Department and recommendations made in other audits, no recommendation was made.	N/A
FY 2010 CCC Financial Statements Audit, Assignment No. 06401-25-FM	
Finding 1: Improvements are needed in financial management system's functionality. Recommendation: Because of actions planned by the Department and recommendations made in other audits, no recommendation was made.	N/A
FY 2011 CCC Financial Statements Audit, Assignment No. 06401-01-11	
Finding 1: Improvements are needed in financial management system's functionality. Recommendation: Because of actions planned by the Department and recommendations made in other audits, no recommendation was made.	N/A
FY 2012 CCC Financial Statements Audit, Assignment No. 06401-02-11	
Finding 1: Improvements are needed in funds control. Recommendation: Because of actions planned by the Department and recommendations made in other audits, no recommendation was made.	N/A
FY 2013 CCC Financial Statements Audit, Assignment No. 06401-03-11	
Finding 1: Improvements are needed in funds control. Recommendation: Because of actions planned by the Department and recommendations made in other audits, no recommendation was made.	N/A

FY 2008 through FY 2013 Material Weaknesses Findings and Recommendations	Status (Reached Management Decision)
FY 2008 NRCS Financial Statements Audit, Assignment No.	10401-02-FM
Finding 1: Improved accounting and controls needed over undelivered orders. Recommendation: Ensure undelivered orders balances are valid at period end.	Yes
Finding 2: Improved accounting and controls needed for unfilled customer orders. Recommendation: Ensure unfilled customer orders are complete and valid at period end.	Yes
Finding 3: Improved accounting and controls needed for accrued expenses. Recommendation: Develop and provide guidance and training regarding policy and procedures over preparing, reviewing, and recording accruals.	Yes
Finding 4: Improved accounting and controls needed for property, plant, and equipment. Recommendation: Ensure capital leases are identified and accounted for as required.	Yes
Finding 5: Improved controls are needed over financial reporting. Recommendation: Ensure employees preparing the financial statements have the appropriate training and that financial statements are reviewed and approved by management to ensure compliance with generally accepted accounting principles.	Yes
FY 2009 NRCS Financial Statements Audit, Assignment No.	10401-03-FM
Finding 1: Improved accounting and controls needed over undelivered orders. Recommendation: Continue to train budget and program personnel to review open obligation balances and monitor compliance.	Yes
Finding 2: Improved accounting and controls needed over the revenue and unfilled customer order process. Recommendation: Develop and implement policies and procedures for reimbursable agreements, accounts receivable, and unfilled customer orders.	Yes
Finding 3: Improved accounting and controls needed over accrued expenses. Recommendation: Provide additional training to field personnel regarding the policy and procedures for recording accruals.	Yes
Finding 4: Improved controls needed over financial reporting. Recommendation: Obtain and use the United States Government Standard General Ledger posting models for conservation easements, travel advances to others, cumulative results of operations for non-appropriated funds, recoveries of prior year obligations, and accounts receivable with the public.	Yes
Finding 5: Improved accounting and controls needed for property, plant, and equipment. Recommendation: Establish a policy that outlines the proper procedures for identifying and tracking the appropriate costs related to the development of new applications through the various stages of the development process.	Yes
FY 2010 NRCS Financial Statements Audit, Assignment No.	10401-03-FM

FY 2008 through FY 2013 Material Weaknesses Findings and Recommendations	Status (Reached Management Decision)
Finding 1: Improved accounting and controls needed over undelivered orders. Recommendation: Review the current policies are compliant with Title 31 of the U.S. Code and GAO's Redbook, The Principles of Federal Appropriations Law.	Yes
Finding 2: Improved accounting and controls needed over the revenue and unfilled customer order process. Recommendation: Develop a systematic methodology for calculating the allowance for uncollectible accounts which considers historical data, estimates losses on an individual and aggregate account basis, and considers other risk factors that may have an impact on NRCS' ability to collect amounts due.	Yes
Finding 3: Improved accounting and controls needed over accrued expenses. Recommendation: Perform quality assurance procedures to determine if accrued expenses are complete, accurate, and exist at quarter and year end.	Yes
Finding 4: Improved controls needed over financial reporting. Recommendation: Establish a more robust internal control identification and evaluation process to identify all significant control deficiencies.	Yes
Finding 5: Improved accounting and controls needed for property, plant, and equipment. Recommendation: Reinforce segregation of duties responsibilities for inventory taking, reminding Accountable Property Officers that the inventory taker should not also have the authority to purchase Property, Plant and Equipment (PP&E).	Yes
Finding 6: Improved general and application access controls needed. Recommendation: Establish a process to actively review and document its review of application, active directory, and VPN access to determine whether it is appropriate based on the employee's role.	Yes
Finding 7: Improved controls needed over purchase and fleet card transactions. Recommendation: NRCS management immediately reviews all cardholders to determine whether they are current NRCS employees and should have access to a purchase card.	Yes
FY 2011 NRCS Financial Statements Audit, Assignment No. 10401-01-11	
Finding 1: Improved accounting and controls needed over undelivered orders. Recommendation: (1) Provide additional training to field personnel related to the identification and recording of advances and disbursements, and (2) provide guidance and policy to field personnel relating to the monitoring and validation of the obligation's period of performance prior to payment.	Yes
Finding 2: Improved accounting and controls needed over accrued expenses. Recommendation: (1) Perform quality assurance procedures to determine if accrued expenses are complete, accurate, and	Yes

FY 2008 through FY 2013 Material Weaknesses Findings and Recommendations	Status (Reached Management Decision)
exist at quarter and year end, (2) reduce the number of standard voucher and year end accruals required by configuring systems to record accruals when goods/services are receipted in the application, where there is a cost benefit; (3) enhance monitoring internal controls over obligations and payment approvals to determine whether appropriate documentation is provided to support the obligation and disbursement; (4) utilize transaction codes in the Foundation Financial Information System to record accruals that do not reverse for direct entry obligations; and (5) provide guidance on the Prompt Payment Act related to the entry of acceptance dates and determine if additional interest is due to vendors or whether the vendor was overpaid as a result of any errors.	
Finding 3: Improved controls are needed over financial reporting. Recommendation: Enforce NRCS' Circular 21 to ensure condition assessment policies and procedures are compliant with SFFAS No. 29	Yes
Finding 4: Improved accounting and controls needed for property, plant and equipment. Recommendation: Develop in coordination with the Department Chief Information Officer a reconciliation process for State offices to utilize to reconcile between the International Technology Services (ITS) property report and State inventory reports.	Yes
Finding 5: Improved general and application access controls are needed. Recommendation: Establish controls to monitor the control environment at ITS and mitigate the identified weaknesses.	Yes
FY 2012 NRCS Financial Statements Audit, Assignment No. 10401-02-11	
Finding 1: Improved controls are needed over general accounting operations. Recommendation: (1) Focus on strengthening the internal control environment and ensuring that system components are fully operational; (2) identify the underlying impediments causing errors in the Accounts Receivable billing module, proper liquidation of advances, and posting of depreciation/amortization; (3) continue to implement procedures over the Fund Balance with Treasury (FBWT) process, to include procedures for ensuring that unprocessed items are cleared from the suspense account in a timely manner; and (4) complete a thorough review of the FBWT suspense account to identify older reconciling items, and take the appropriate actions to clear these items.	Yes
Finding 2: Improved controls are needed over financial reporting. Recommendation: (1) Continue to implement a comprehensive financial management system strategy to ensure compliance with Federal financial management systems requirements; (2) enforce accounting entries that are consistent with those prescribed by the United States General Ledger; (3) develop policies to ensure all relevant Federal accounting standards are followed; (4) improve the communication and implementation of policies	Yes

FY 2008 through FY 2013 Material Weaknesses Findings and Recommendations	Status (Reached Management Decision)
and procedures regarding the preparation of financial statements; Management's Discussion and Analysis, footnote disclosures, and Required Supplementary Information; (5) ensure all qualitative information reported in footnote disclosures, including supplementary information, is accurate and current; and (6) continue to develop remediation plans to address FMFIA and FFMIA noncompliance.	
Finding 3: Improved controls are needed over property, plant and equipment. Recommendation: (1) Complete the PP&E remediation efforts as soon as possible to ensure that real property and personal property information is provided in a timely manner. Remediation efforts should include completion of real property and personal property physical inventories, and review of budget object codes currently assigned to personal property; and (2) finalize efforts to implement the "Methodology for Condition Assessment Surveys and Determining Deferred Maintenance" to track deferred maintenance, and suggest that NRCS continue to develop and implement effective steps and related policies and procedures to track improvements to leased and owned assets.	Yes
Finding 4: Improved controls are needed over accrued expenses. Recommendation: (1) Finalize and implement steps to regularly review the accounts payable accrual methodology, and grants and agreements accrual methodology against actual results to validate their predictive reliability; (2) develop a process for accruals and disbursements, including Intragovernmental Payment and Collection transactions, to properly documents that the related accrual or disbursement is appropriate; and (3) research and remediate current debit vendor balances.	Yes
Finding 5: Improved controls are needed over reimbursable agreements. Recommendation: (1) Continue to implement sustainable internal controls to verify the completeness and accuracy of Unfilled Customers Orders (UCO's) for future years; (2) continue to conduct analysis of current UCO balances to determine if they are complete;. (3) continue to review open UCO balances for validity and accuracy; (4) continue to provide comprehensive training, instruction, and support to personnel responsible for recording and monitoring Reimbursable Agreements (RA); (5) continuously monitor the effectiveness of RA controls; and (6) confirm the accurate conversion of UCO balances for beginning balances FY 2013.	Yes
FY 2013 NRCS Financial Statements Audit, Assignment No. 10401-03-11	
Finding 1: Improved accounting and controls are needed over undelivered orders. Recommendation: (1) Continue to monitor activity in USSGL accounts 4801, 4871, and 4881 to ensure that invalid upward and downward adjustments are identified and negated in a timely manner and that balances are appropriate; (2) continue to monitor open obligations to ensure that upward and downward adjustments are recorded in the appropriate period and	In the process of reaching management decision.

FY 2008 through FY 2013 Material Weaknesses Findings and Recommendations	Status (Reached Management Decision)
liquidated timely; and, (3) provide adequate training to personnel related to the documentation requirements for support.	
<p>Finding 2: Improved controls are needed over financial reporting.</p> <p>Recommendation: (1) Identify and document transactions that, when required, are recorded in accordance with the guidance found in SFFAS No. 21; (2) implement procedures to reduce the need to record a large volume of misstatements at year end; (3) establish policies/guidelines that assist accounting personnel in properly determining the type of sufficient supporting documentation for journal entries and deferred maintenance; and (4) enhance the management review of journal entries to include use of appropriate posting models obtaining and inspecting supporting documentation.</p>	In the process of reaching management decision.
<p>Finding 3: Improved accounting and controls are needed over expenses.</p> <p>Recommendation: (1) Provide guidance and/or training to employees on policies and procedures to ensure purchase transactions have adequate supporting documentation to determine if they are accurate and exist; (2) enhance monitoring controls over payment approvals to determine whether appropriate documentation is provided to support the disbursement; and (3) enhance procedures to determine if accrued expenses are complete, accurate, and exist at quarter-ends and are properly supported.</p>	In the process of reaching management decision.
<p>Finding 4: Improved accounting and controls are needed over revenue and accounts receivable.</p> <p>Recommendation: (1) Continue to improve documentation that will support revenue, accounts receivable, and unfilled customer orders transactions in accordance with OMB Circular No. A-123; and (2) review and liquidate invalid unfilled customer orders.</p>	In the process of reaching management decision.
FY 2013 FCIC/RMA Financial Statements Audit, Assignment No. 05401-03-11	
<p>Finding 1: Improvement needed in controls over estimated losses on insurance claims calculation.</p> <p>Recommendation: (1) Implement procedures to ensure that manual processes of the indemnity projection model are performed and subsequently reviewed by independent individuals within management to ensure the review process over calculation is adequate and limits the risk of material misstatements in the liability for estimated losses on insurance claims at year-end; (2) consider performing an Independent Verification and Validation review of the indemnity projection model every year in which a new model is implemented, or when a model has been substantially enhanced; (3) consider the need to save documentation to provide an audit trail of all relevant computations; and (4) consider performing additional risk assessments on the indemnity calculation aimed at the processes that have the greater risks of errors in the calculations.</p>	In the process of reaching management decision.

Mr. Aderholt: Please update the table from the fiscal year 2014 QFRs showing the amount spent for confidential operational activities for fiscal years 2009 through 2013.

Response: The information requested follows:

Fiscal Year	Available	Spent
2009	\$125,000	\$77,654
2010	\$125,000	\$88,451
2011	\$125,000	\$92,835
2012	\$125,000	\$96,979
2013	\$125,000	\$83,061

Mr. Aderholt: Please provide a summary of complaints from the OIG Hotline for fiscal year 2013.

Response: The information requested follows:

NUMBER OF COMPLAINTS RECEIVED FY 2013	
Type	Number
Employee Misconduct	281
Participant Fraud	3,222
Waste/Mismanagement	459
Health/Safety Problem	44
Opinion/Information	146
Bribery	2
Reprisal	2
Total Number of Complaints Received	4,156

Mr. Aderholt: Please provide a table showing the number of audit reports, investigative reports, indictments, convictions, and lawsuits filed for fiscal year 2013.

Response: The information requested follows:

Full FY 2013 Results in Key Categories—October 1, 2012–September 30, 2013

Audit Reports Issued	54
Investigative Reports Issued	335
Indictments	917
Convictions*	551
Lawsuits**	20

*The period of time to obtain court action on an indictment varies widely; therefore the 551 convictions do not necessarily correlate directly to the 917 indictments.

** Any civil judicial proceeding filed on behalf of a Government agency that results directly and substantially from an OIG investigation.

Mr. Aderholt: How were the indictments resolved, and what percent led to convictions? Please report for the latest data available.

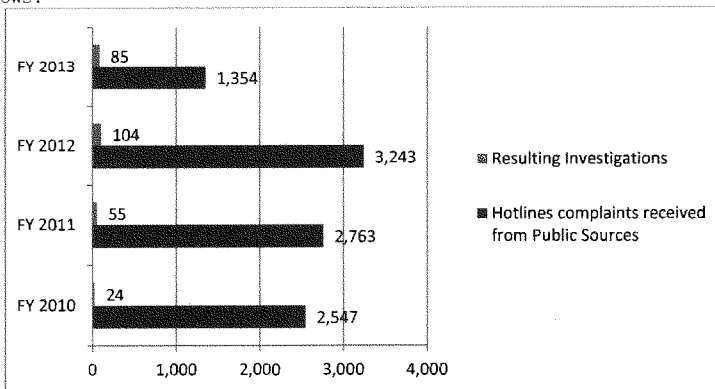
Response: For the investigations closed during FY 2013, in which an indictment was obtained and wherein all judicial and administrative action had been completed, 95 percent of the indictments in those investigations led to convictions. It should be noted that indictments may be obtained in one fiscal year, while the resulting convictions may not be obtained until months later, or longer, due to prosecutorial and judicial processes.

Mr. Aderholt: Please update the description from the fiscal year 2014 QFRs of the work the IG is doing in regard to federal, state or industry employee whistleblowers. How many open investigations and reviews are related to whistleblower complaints

Response: Currently, OIG does not have any open investigations related to allegations of whistleblower reprisal. Any allegations received with regard to whistleblower reprisal are coordinated with and/or referred to the Office of Special Counsel. In FY 2013, there were a total of 90 open investigations and 30 audits initiated resulting from complaints received through the OIG Hotline. OIG receives complaints from many sources including, but not limited to, Federal and State employees and the general public. Any individual who contacts OIG to report an allegation of fraud, waste, or abuse is considered a potential whistleblower. Each Hotline complaint received is reviewed and a determination made whether the matter should be addressed by OIG; referred to the appropriate USDA agency for review, response, and appropriate action; or referred to the appropriate Federal government agency for any action if deemed appropriate.

Mr. Aderholt: How many complaints did OIG receive from outside groups that are not whistleblower complaints in fiscal years 2010 through 2013? How many did OIG consider worthy of further investigation?

Response: As noted in response to number 53 above, we consider all complaints received to be potential whistleblower complaints. However, we do track complaints received from public sources through the OIG Hotline as follows:



Mr. Aderholt: Please provide for the record the amounts transferred to OIG from the Department of Justice Assets Forfeiture fund for fiscal years 2008 through 2013. Provide an explanation of the use of these funds by OIG.

Response: As a participating member of the Department of Justice (DOJ) Assets Forfeiture Fund, OIG receives funds pursuant to annual allocation requests and pursuant to petitions for remission or mitigation.

Under DOJ's annual allocations, funds can be requested for program operations expenses and investigative expenses. Investigative expenses incurred by OIG involve mainly the equipping of conveyances when the DOJ annual allocation allows. Program operations expenses include the following: case related expenses, joint law enforcement operations, special contract services, contracts to identify assets, and training.

Funds received as a result of petitions for remission or mitigation are utilized for law enforcement activities authorized under the Inspector General Act.

Department of Justice			
Fiscal Year	Petitions	Annual Allocations	Totals
2008	\$663,650	\$1,640,000	\$2,303,650
2009	\$123,041	\$2,219,000	\$2,342,041
2010	\$145,711	\$2,222,000	\$2,367,711
2011	\$11,663	\$1,683,000	\$1,694,663
2012	\$40,190	\$1,725,000	\$1,765,190
2013	\$0	\$1,614,000	\$1,614,000

Mr. Aderholt: Please provide for the record amounts transferred to OIG from the Department of Treasury Forfeiture Fund for fiscal years 2008 through 2013. Provide an explanation of the use of these funds by OIG.

Response: The amounts below represent funds received from petitions for remission or mitigation from the Department of Treasury Forfeiture Funds. OIG does not receive a separate annual allocation from the Department of Treasury.

Receipt of Petition Funds	
Fiscal Year	Department of Treasury
2008	\$210,421
2009	\$485,279
2010	\$1,400,501
2011	\$0
2012	\$52,033

Receipt of Petition Funds	
Fiscal Year	Department of Treasury
2013	\$135,205
Totals	\$2,283,439

Mr. Aderholt: Please provide for the record amounts transferred to OIG through the granting of a Petition for Remission or Mitigation for fiscal years 2008 through 2013.

Response: The information requested follows:

Receipt of Petition Funds			
Fiscal Year	Department of Treasury	Department of Justice	Totals
2008	\$210,421	\$663,650	\$874,071
2009	\$485,279	\$123,041	\$608,320
2010	\$1,400,501	\$145,711	\$1,546,212
2011	\$0	\$11,663	\$11,663
2012	\$52,033	\$40,190	\$92,223
2013	\$135,205	\$0	\$135,205
Totals	\$2,283,439	\$984,255	\$3,267,694

Mr. Aderholt: Please describe the pay scale for OIG employees. How many are entitled to Law Enforcement Officer Pay? How many receive Law Enforcement Availability Pay?

Response: OIG does not have any employees on a special rate pay scale. OIG employees are either on the GS or ES pay scale. However, 151 of the Criminal Investigators (GS 1811) are entitled to Law Enforcement Officer Pay, which provides them with an additional 25%, pursuant to law and Office of Personnel Management (OPM) regulations. OIG uses the Federal locality pay scale authorized by OPM for all other employees within the Federal Government.

Mr. Aderholt: Please provide for the record a table showing OIG-owned firearms.

Response: The information requested follows:

OIG Owned Firearms (Inventory as of 03.13.14)	
Type of Firearms	Number
.40 cal. semiautomatic pistols	270
9mm semiautomatic pistols	41
MP-5s	83
M4 carbines	15

OIG Owned Firearms (Inventory as of 03.13.14)	
.357 cal. revolvers	6
.38 cal. revolvers	11
12-gauge shotguns	93
Miscellaneous weapons maintained for training purposes	87
Total	606

Mr. Aderholt: Please update the table from the fiscal year 2014 QFRs showing the allocation of OIG's resources and the percent of each that went towards investigations and audits of each USDA agency for fiscal year 2010 through 2013.

FY 2010 Audit						
	Total OIG Dollars in Millions	OIG Staff Years	Audit Dollars in Millions	Percentage of OIG Dollars per Agency	Audit Staff Years	Percentage of OIG Staff Years per Agency
RMA	\$4,300	29	\$1,600	5%	11	2%
FSA	10,000	67	3,800	4	27	5
FAS	500	3	0	0	0	0
FNS-SNAP	18,900	123	2,600	3	18	3
FNCS-OTHER	8,500	56	2,800	3	20	3
AMS	1,600	11	900	1	6	1
APHIS	4,200	28	800	1	5	1
GIPSA	50	0	0	0	0	0
FSIS	4,000	27	1,700	2	12	2
ARS	600	5	80	0	0	0
NIFA	100	0	40	0	0	0
RD	1,200	8	1,200	1	8	1
RBS	1,700	12	1,600	2	11	1
RHS	6,900	47	4,700	5	33	6
RUS	1,300	9	1,000	1	7	1
FS	8,800	60	6,800	8	48	8
NRCS	3,000	21	2,100	2	15	2
OO	40	0	0	0	0	0
OCFO	800	6	700	1	6	1
OCIO	500	3	500	1	3	1
OIG (internal)	6,400	44	5,700	5	40	7
Multi-Agency	4,797	34	4,646	4	33	6
OCRE	80	0	0	0	0	0
SEC	30	0	0	0	0	0
Total	\$88,297	593	\$43,266	49%	303	51%

FY 2010 Investigations						
	Total OIG Dollars in Millions	OIG Staff Years	Investigation Dollars in Millions	Percentage of OIG Dollars per Agency	Investigation Staff Years	Percentage of OIG Staff Years per Agency
RMA	\$4,300	29	\$2,800	3%	18	3%
FSA	10,000	67	6,200	7	40	7
FAS	500	3	500	1	3	1
FNS-SNAP	18,900	123	16,300	18	105	18
FNCS- OTHER	8,500	56	5,700	6	36	6
AMS	1,600	11	800	1	5	1
APHIS	4,200	28	3,400	4	22	4
GIPSA	50	0	40	0	0	0
FSIS	4,000	27	2,200	3	15	3
ARS	600	5	500	1	4	1
NIFA	100	0	50	0	0	0
RD	1,200	8	0	0	0	0
RBS	1,700	12	100	0	1	0
RHS	6,900	47	2,100	2	14	2
RUS	1,300	9	300	0	2	0
FS	8,800	60	2,000	2	13	2
NRCS	3,000	21	1,000	1	6	1
OO	40	0	40	0	0	0
OCFO	800	6	100	0	2	0
OCIO	500	3	0	0	0	0
OIG (internal)	6,400	44	700	2	4	0
Multi- Agency	4,797	34	91	0	0	0
OCRE	80	0	80	0	0	0
SEC	30	0	30	0	0	0
Total	\$88,297	593	\$45,031	51%	290	49%

FY 2011 Audit						
	Total OIG Dollars in Millions	OIG Staff Years	Audit Dollars in Millions	Percentage of OIG Dollars per Agency	Audit Staff Years	Percentage of OIG Staff Years per Agency
RMA	\$3,300	22	\$1,000	1%	7	1%
FSA	7,500	51	3,100	3	22	4
FAS	700	5	300	3	2	0
FNS-SNAP	22,700	151	2,000	2	14	2
FNCS-OTHER	8,400	57	2,400	3	17	3
AMS	2,100	15	1,400	2	10	3
APHIS	3,600	25	1,500	2	11	2
GPSA	200	2	0	0	0	0
FSIS	4,700	32	2,300	3	16	3
ARS	600	4	300	0	2	0
NIFA	120	1	20	0	0	0
RD	1,500	10	1,400	2	10	2
NASS	20	0	0	0	0	0
RBS	1,500	10	1,100	1	8	1
RHS	5,900	41	4,000	5	29	6
RUS	1,100	8	900	1	6	1
FS	6,900	49	5,600	6	40	7
NRCS	3,600	25	2,900	3	21	3
CR	400	3	400	0	3	0
OO	20	0	0	0	0	0
OCFO	700	5	700	1	5	1
OCIO	700	6	700	1	5	1
OGC	30	0	0	0	0	0
OIG (internal)	6,800	48	6200	7	45	7
OHCM	10	0	10	0	0	0
Multi- Agency	5,009	36	5105	3	37	5
OCRE	200	1	0	0	0	0
SEC	130	1	0	0	0	0
Total	\$88,439	608	\$43,335	49%	310	52%

FY 2011 Investigations						
	Total OIG Dollars in Millions	OIG Staff Years	Investigation Dollars in Millions	Percentage of OIG Dollars per Agency	Investigation Staff Years	Percentage of OIG Staff Years per Agency
RMA	\$3,300	22	\$2,400	3%	16	3%
FSA	7,500	51	4,400	5	29	5
FAS	700	5	500	1	3	0
FNS-SNAP	22,700	151	20,700	23	137	23
FNCS- OTHER	8,400	57	6,000	7	39	6
AMS	2,100	15	700	1	5	1

FY 2011 Investigations						
	Total OIG Dollars in Millions	OIG Staff Years	Investigation Dollars in Millions	Percentage of OIG Dollars per Agency	Investigation Staff Years	Percentage of OIG Staff Years per Agency
APHIS	3,600	25	2,100	2	14	2
GIPSA	200	2	200	0	2	0
FSIS	4,700	32	2,400	3	16	3
ARS	600	4	300	0	2	0
NIFA	120	1	100	0	1	0
RD	1,500	10	0	0	0	0
NASS	20	0	20	0	0	0
RBS	1,500	10	300	0	2	0
RHS	5,900	41	1,800	2	12	2
RUS	1,100	8	200	0	1	0
FS	6,900	49	1,300	1	8	1
NRCS	3,600	25	700	1	4	1
CR	400	3	0	0	0	0
OO	20	0	20	0	0	0
OCFO	700	5	0	0	0	0
OCIO	700	6	0	0	0	0
OGC	30	0	30	0		
OIG (internal)	6,800	48	600	1	4	2
OCHM	10	0	0	0	0	0
Multi- Agency	5,009	36	4	1	1	0
OCRE	200	1	200	0	1	0
SEC	130	1	130	0	1	0
Total	\$88,439	608	\$45,104	51%	298	49%

FY 2012 Audit						
	Total OIG Dollars in Millions	OIG Staff Years	Audit Dollars in Millions	Percentage of OIG Dollars per Agency	Audit Staff Years	Percentage of OIG Staff Years per Agency
RMA	\$2,986	19	\$992	1%	7	1%
FSA	6,016	38	1,666	2	11	2
FAS	1,177	8	725	1	5	1
FNS-SNAP	26,546	164	3,699	4	25	5
FNCS-OTHER	3,955	25	1,129	1	7	1
AMS	1,599	10	1,030	1	7	1
APHIS	2,689	17	1,419	2	9	2
GIPSA	369	2	0	0	0	0
FSIS	4,622	29	2,318	3	15	3
ARS	677	4	457	1	3	1
NIFA	34	0	2	0	0	0
ERS	10	0	0	0	0	0
NASS	20	0	0	0	0	0
RD	1,351	9	1,351	2	9	2
RBS	1,897	12	1,136	1	8	1
RHS	4,476	29	2,273	3	15	3

FY 2012 Audit						
	Total OIG Dollars in Millions	OIG Staff Years	Audit Dollars in Millions	Percentage of OIG Dollars per Agency	Audit Staff Years	Percentage of OIG Staff Years per Agency
RUS	2,716	18	2,304	3	15	3
FS	5,661	37	4,328	5	29	5
NRCS	2,566	17	2,295	3	15	3
CR	258	2	258	0	2	0
OO	2	0	0	0	0	0
OCFO	1,039	7	1,023	1	7	1
OCIO	219	1	197	0	1	0
OHCM	14	0	11	0	0	0
OIG (internal)	6,269	41	5,690	7	38	7
Multi- Agency	6,196	41	6,099	7	40	8
OGC	1,116	7	1,116	1	7	1
OCRE	72	0	0	0	0	0
DM	320	3	320	0	2	0
OMS	93	1	93	0	1	0
SEC	608	4	0	0	0	0
Total	\$85,573	545	\$41,931	49%	278	51%

FY 2012 Investigations						
	Total OIG Dollars in Millions	OIG Staff Years	Investigation Dollars in Millions	Percentage of OIG Dollars per Agency	Investigation Staff Years	Percentage of OIG Staff Years per Agency
RMA	\$2,986	19	\$1,993	2%	12	2%
FSA	6,016	38	4,349	5	27	5
FAS	1,177	8	451	1	3	1
FNS-SNAP	26,546	164	22,847	27	140	26
FNCS- OTHER	3,955	25	2,826	3	17	3
AMS	1,599	10	569	1	3	1
APHIS	2,689	17	1,271	1	8	1
GIPSA	369	2	369	0	2	0
FSIS	4,622	29	2,304	3	14	3
ARS	677	4	219	0	1	0
NIFA	34	0	33	0	0	0
ERS	10	0	10	0	0	0
NASS	20	0	20	0	0	0
RD	1,351	9	0	0	0	0
RBS	1,897	12	761	1	5	1
RHS	4,476	29	2,202	3	13	2
RUS	2,716	18	412	0	3	1
FS	5,661	37	1,333	2	8	1
NRCS	2,566	17	271	0	2	0
CR	258	2	0	0	0	0
OO	2	0	3	0	0	0
OCFO	1,039	7	16	0	0	0

FY 2012 Investigations						
	Total OIG Dollars in Millions	OIG Staff Years	Investigation Dollars in Millions	Percentage of OIG Dollars per Agency	Investigation Staff Years	Percentage of OIG Staff Years per Agency
OCIO	219	1	23	0	0	0
OHCM	14	0	3	0	0	0
OIG (internal)	6,269	41	578	1	4	1
Multi- Agency	6,196	41	98	1	1	1
OGC	1,116	7	0	0	0	0
OCRE	72	0	72	0	0	0
DM	320	3	0	0	0	0
OMS	93	1	0	0	0	0
SEC	608	4	608	0	4	0
Total	\$85,573	545	\$43,641	51%	267	49%

FY 2013 Audit						
	Total OIG Dollars in Millions	OIG Staff Years	Audit Dollars in Millions	Percentage of OIG Dollars per Agency	Audit Staff Years	Percentage of OIG Staff Years per Agency
RMA	\$3,066	19	\$874	1%	6	1%
FSA	6,696	42	2,574	3	17	3
FAS	1,224	8	916	1	6	1
FNS-SNAP	26,409	161	3,617	4	24	5
FNCS-OTHER	5,374	34	2,480	3	16	3
AMS	916	6	664	1	4	1
APHIS	3,214	20	1,538	2	10	2
GIPSA	180	1	0	0	0	0
FSIS	3,820	24	2,118	3	14	3
ARS	703	4	374	0	2	0
NIFA	73	0	2	0	0	0
ERS	78	0	0	0	0	0
RD	1,242	8	1,242	2	8	2
NASS	266	2	266	0	2	0
RBS	1,389	9	582	1	4	1
RHS	2,991	19	995	1	6	1
RUS	2,115	14	1,561	2	10	2
FS	2,017	13	1,310	2	9	2
NRCS	1,795	12	1,621	2	11	2
OPPM	568	4	568	1	4	1
OO	2	0	0	0	0	0
OCFO	1,451	9	1,411	2	9	2
OCIO	510	3	439	1	3	1
OGC	1,384	9	1,381	2	9	2
OIG (internal)	6,438	41	5,938	7	38	7
OHCM	11	0	11	0	0	0
Multi-	5,729	37	5,698	6	37	7

FY 2013 Audit						
Agency	Total OIG Dollars in Millions	OIG Staff Years	Audit Dollars in Millions	Percentage of OIG Dollars per Agency	Audit Staff Years	Percentage of OIG Staff Years per Agency
OCRE	3	0	0	0	0	0
OHSEC	358	2	358	0	2	0
OMS	99	1	99	0	1	0
SEC	317	2	0	0	0	0
DM	1,525	10	1,525	2	10	2
Total	\$81,963	514	\$40,162	49%	262	51%

FY 2013 Investigations						
	Total OIG Dollars in Millions	OIG Staff Years	Investigation Dollars in Millions	Percentage of OIG Dollars per Agency	Investigation Staff Years	Percentage of OIG Staff Years per Agency
RMA	\$3,066	19	\$2,192	3%	13	1%
FSA	6,696	42	4,120	5	25	5
FAS	1224	8	307	0	2	0
FNS-SNAP	26,409	161	22,792	28	138	28
FNCS-OTHER	5,374	34	2,894	4	18	4
AMS	916	6	252	0	2	0
APHIS	3,214	20	1,677	2	10	2
GIPSA	180	1	180	0	1	0
FSIS	3,820	24	1,702	2	10	2
ARS	703	4	329	0	2	0
NIFA	73	0	71	0	0	0
ERS	78	0	78	0	0	0
RD	1,242	8	0	0	0	0
NASS	266	2	0	0	0	0
RBS	1,389	9	807	2	5	1
RHS	2,991	19	1,997	2	13	3
RUS	2,115	14	553	1	3	1
FS	2,017	13	708	1	4	1
NRCS	1,795	12	174	0	1	0
OPPM	568	4	0	0	0	0
OO	2	0	3	0	0	0
OCFO	1,451	9	40	0	0	0
OCIO	510	3	71	0	0	0
OGC	1384	9	3	0	0	0
OIG (Internal)	6,438	41	500	1	3	1
OHCM	11	0	0	0	0	0
Multi-Agency	5,729	37	31	0	0	0
OCRE	3	0	3	0	0	0
OHSEC	358	2	0	0	0	0

FY 2013 Investigations						
	Total OIG Dollars in Millions	OIG Staff Years	Investigation Dollars in Millions	Percentage of OIG Dollars per Agency	Investigation Staff Years	Percentage of OIG Staff Years per Agency
OMS	99	1	0	0	0	0
SEC	317	2	317	0	2	0
DM	1,525	10	0	0	0	0
Total	\$81,963	514	\$41,801	51%	252	49%

Mr. Aderholt: Please provide for the record a description of the latest OIG work relating to the administrative and management functions and offices of USDA.

Response: The following is a description of the latest OIG work relating to the administrative and management functions and offices of USDA.

AUDIT WORK CURRENTLY IN PROCESS		
Audit No.	Audit Title	Brief Objective
Departmental Management		
50024-0001-13	Review of the Department's US Bank Purchase Card and Convenience Check Data	Determine whether the agency's charge card holders are following rules and regulations that govern the use of the Department's US-Bank purchase and travel charge cards
89901-0001-13	Review of USDA Contractor Databases	Analyze the data in the Integrated Acquisition System [IAS] to check for anomalies and to ensure that the data are properly and accurately reported in accordance with laws and regulations.
91099-0002-21	USDA StrikeForce Initiative	Review and evaluate (1) the transfer of all funds from various agencies within the Department to Office of Advocacy and Outreach (OAO) that were used for the StrikeForce Initiative, (2) the approval and disbursement of all funds to recipients under the StrikeForce Initiative, and (3) the use of these funds by recipients and OAO's monitoring of the recipients' actions.
91099-0003-21	Eligibility and Compliance Consideration for Section 2501 Grants Awarded FYs 2010-2011	Determine whether the recipients selected by OAO to receive grant funds through the Section 2501 Program in FYs 2010 and 2011 were eligible, and that OAO complied with applicable regulations in selecting the recipients.
Office of the Assistant Secretary for Civil Rights		
50099-0001-12	Review of Selected Contract Actions in the Office of the Assistant Secretary for Civil Rights	Determine if commitments were properly authorized by the Office of Assistant Secretary for Civil Rights (OASCR) and the Office of Procurement and Property Management's Procurement Operation Division (OPPM-POD) and that personnel adhered to Departmental policies and procedures, as well

AUDIT WORK CURRENTLY IN PROCESS		
Audit No.	Audit Title	Brief Objective
		as the Federal Acquisition Regulations.
50601-0002-21	Hispanic and Women Farmers and Ranchers Claim Resolution Process	Determine if the claims review process is adequate and functioning, as prescribed, and to ensure that funds are distributed only to eligible applicants.
50601-0003-21	<i>In re Black Farmers Discrimination Litigation</i> - Adjudicated Claims	Conduct an audit of the completed <i>In re Black Farmers Discrimination Litigation</i> claims process to determine if awards were granted to eligible claimants. This audit will include reviewing a statistical sample of adjudicated claims.
Office of the Chief Financial Officer		
11401-0007-11	SSAE No.16 Report on Controls at NFC for October 1, 2013 to July 1, 2014	Obtain reasonable assurance about whether, in all material respects, based on suitable criteria, (1) management's description of National Finance Center (NFC) systems fairly presents the systems that were designed and implemented throughout the period specified in the description, (2) the controls related to the control objectives stated in the description of NFC systems were suitably designed throughout the specified period, and (3) the controls operated effectively to provide reasonable assurance that the control objectives stated in the description of NFC systems were achieved throughout the specified period.
11401-0008-11	Agreed-Upon Procedures: Employee Benefits, Withholdings Contributions, and Supplemental Semiannual Headcount Reporting Submitted to the Office of Personnel Management	Assist the OPM in assessing the reasonableness of the retirement, health benefits, and life insurance withholding/contributions, as well as semiannual headcount information submitted by agencies.
50099-0001-23	USDA's Controls Over Economy Act Transfers for Greenbook Programs	Evaluate the adequacy of management controls over the Department's EA transfers, and the collection and use of funds under Department-wide reimbursable agreements, commonly referred to as Greenbook charges. After beginning the audit, we expanded our review to include an assessment of how the Working Capital fund (WCF) is being used and managed. This was necessary to address one of the items in the Congressional request, and also because USDA agencies did not always distinguish between EA and WCF transfers.

AUDIT WORK CURRENTLY IN PROCESS		
Audit No.	Audit Title	Brief Objective
50024-0005-11	Improper Payments Elimination and Recovery Act Compliance Review for Fiscal Year 2013	Review USDA's fiscal year 2013 Agency Financial Report and accompanying material to determine if USDA is in compliance with the Improper Payments Information Act of 2002, as amended by IPERA. In addition, we will evaluate USDA's accuracy and completeness of reporting; and performance in reducing and recapturing improper payments.
50024-0006-11	Fiscal Year 2013 Executive Order 13520, Reducing Improper Payments, High-Dollar Overpayments Reports Review	Review USDA's fiscal year 2013 quarterly high-dollar reports to assess the level of risk associated with the applicable programs, determine the extent of oversight warranted, and provide the agency head with recommendations, if any, for modifying the agency's recovery and corrective action plans.
50401-0007-11	Department of Agriculture's Financial Statements for Fiscal Years 2014 and 2013	Determine whether the financial statements present fairly, in all material aspects, in accordance with accounting principles.
Office of the Chief Information Officer		
50501-0005-12	CIGIE Cloud Computing Initiative - Status of Cloud-Computing Environment within the USDA	Evaluate each selected agency's efforts to adopt cloud-computing technologies and to review executed contracts between agencies and cloud service providers for compliance with applicable standards. This audit is directly related to a CIGIE IT initiative to look at cloud computing in multiple Federal agencies.
50501-0006-12	FY 2014 Federal Information Security Management Act Report	Evaluate the status of USDA's overall IT security program by evaluating (1) the effectiveness of the Department's oversight of agencies' IT security programs, and compliance with FISMA; (2) agencies' systems of internal controls over IT assets; (3) the Department's progress in establishing a Departmentwide security program, which includes effective certifications and accreditations; (4) agencies' and the Department's POA&M consolidation and reporting process; and (5) effectiveness of controls over configuration management, incident response, IT training, remote access management, identity and access management, continuous monitoring, contingency planning, contractor systems, and capital planning.
88501-0002-12	Management and Security over USDA's Universal Telecommunications Network (UTN)	Determine whether the Department's UTN is configured, managed, and ultimately secured in accordance with Departmental, OMB, and NIST guidance.

Mr. Aderholt: Please provide for the record a description of the latest OIG work relating to each of USDA agencies, including the U.S. Forest Service.

Response: Following is a table of audit work currently in process. Some assignments are identified in response to your question 61, above, on OIG work relating to USDA administrative and management functions so the information is not duplicated in response to this question. Following this table are summaries of audits completed since our last testimony (March 2013) relating to the USDA agencies. As requested, we have included audits conducted in the FS. The information is current as of March 13, 2014. Issued OIG audit reports are available on our Web site at <http://www.usda.gov/oig/rptsaudits.htm>.

AUDIT WORK CURRENTLY IN PROCESS		
Audit No.	Audit Title	Brief Objective
Agricultural Marketing Service		
01601-0001-41	AMS Procurement and Inspection of Fruits and Vegetables	Evaluate whether AMS has adequate controls to ensure fruits and vegetables are procured in compliance with Federal purchasing regulations and products are timely and effectively inspected.
Agricultural Research Service		
02601-0001-21	Adequacy of Controls to Prevent the Release of Sensitive Technology	Determine if ARS has designed and implemented controls OIG recommended in its 2005 audit [02601-01-Ch] to ensure sensitive technology has not been susceptible to questionable transfer.
Farm Service Agency		
03501-0001-12	Review of Farm Service Agency's Initiative to Modernize and Innovate the Delivery of Agricultural Systems (MIDAS)	Determine the effectiveness and efficiency of the Farm Service Agency's (FSA) MIDAS project. Specifically, we will evaluate the current project's status and timeline, funding, information technology security, and system performance.
03601-0001-22	FSA Compliance Activities	Determine if FSA's compliance activities are adequate to achieve effective and efficient operations, ensure compliance with laws and regulations, and ensure government resources are used to achieve intended program results. Evaluate the impacts of staff and budget cuts on the agency's compliance activities and follow up on recommendations in our prior audit report <i>FSA Compliance Activities</i> , dated September 2005 (03601-12-Ch).
03601-0002-22	Economic Adjustment Assistance to Users of Upland Cotton	Review the implementation and the effectiveness of the program in accomplishing its intended goals.
03702-0001-31	Noninsured Crop	Evaluate FSA's management controls to ensure

AUDIT WORK CURRENTLY IN PROCESS		
Audit No.	Audit Title	Brief Objective
	Disaster Assistance Program (NAP)	the NAP is effectively and properly implemented in accordance with laws, regulations, policies, and procedures. This includes FSA's controls to ensure participant and crop eligibility for NAP, controls to ensure accuracy of the information used to calculate participant's loss guarantees and loss payments, and controls in place to cover payment and income limitations.
03702-0001-32	Livestock Forage Disaster Program (LFP)	Determine whether existing procedures and practices are appropriate to ensure that LFP objectives are achieved. Specifically, we will assess and test whether producers meet eligibility requirements, producers complied with program requirements, payments are accurately computed and properly paid, and compliance operations are effective.
Rural Housing Service		
04601-0001-31	RD Single Family Housing (SFH) Direct Loan Servicing and Payment Assistance Recapture	Review the servicing of direct SFH loans and determine if the Centralized Servicing Center correctly computes the amount of payment assistance recapture.
Risk Management Agency		
05401-0004-11	Federal Crop Insurance Corporation/Risk Management Agency's Financial Statements for Fiscal Years 2014 and 2013	Determine whether the financial statements present fairly, in all material aspects, in accordance with accounting principles.
05601-0001-22	Risk Management Agency National Program Operations Reviews (NPOR)	Assess whether RMA NPORs reasonably determine if the AIPs are substantially in compliance with laws, regulations, the Standard Reinsurance Agreement, associated Appendices, and approved Federal Crop Insurance Corporation policies and procedures.
05601-0002-31	Federal Crop Insurance Program - Enterprise Units	Evaluate the effectiveness of the design and execution of enterprise units within the Federal Crop Insurance Program.
Commodity Credit Corporation		
06401-0004-11	Commodity Credit Corporation's Financial Statements for Fiscal Years	Determine whether the financial statements present fairly, in all material aspects, in accordance with accounting principles.

AUDIT WORK CURRENTLY IN PROCESS		
Audit No.	Audit Title	Brief Objective
	2014 and 2013	
Foreign Agricultural Service		
07601-0001-22	Private Voluntary Organization Grant Fund Accountability	Evaluate whether FAS has adequate internal controls to ensure that PVOs are making proper use of program funds to efficiently and effectively operate Food for Progress Program agreements and achieve program objectives.
07601-0001-23	Assess the Effectiveness of the Export Credit Guarantee Program	Assess whether FAS has effectively implemented the Export Credit Guarantee Program to meet the Department's trade strategic goal and whether FAS has adequate controls to ensure the program is effectively administered in accordance with program regulations, policies, and procedures.
Forest Service		
08601-0001-31	Forest Service Oversight and Compliance Activities	Determine if FS's oversight and compliance activities are adequate to manage and achieve intended program results.
08601-0002-41	FS Firefighting Cost Share Agreements with Non-Federal Entities	Evaluate the adequacy of the Forest Service's controls surrounding the administration of cost-share agreements.
Rural Utilities Service		
09703-0002-22	Review of Water and Waste Disposal Loan and Grant Program	Determine if a water and sewer company appropriately used USDA funds related to its most recent projects.
Natural Resources Conservation Service		
10401-0004-11	Natural Resources Conservation Service's Financial Statements for Fiscal Year 2014	Determine whether the financial statements present fairly, in all material aspects, in accordance with accounting principles.
10601-0001-23	NRCS Controls Over Land Valuations for Conservation Easements	Evaluate the adequacy of NRCS' controls over the land valuation process for conservation easements.

AUDIT WORK CURRENTLY IN PROCESS		
Audit No.	Audit Title	Brief Objective
10601-0001-31	Environmental Quality Incentives Program (EQIP)	Evaluate NRCS' management controls to ensure EQIP is effectively and properly implemented, in accordance with laws, regulations, policies, and procedures.
10601-0001-32	Controls over the Conservation Stewardship Program	Determine whether NRCS has adequate controls over the program. Specifically, we will evaluate the accuracy of eligibility determinations and payments, plus producer compliance with CSP requirements.
10601-0002-31	NRCS Conservation Easement Compliance	Determine whether NRCS' conservation easement monitoring and non-compliance management policies and procedures are adequate and functioning as intended to ensure compliance with NRCS' conservation easement provisions and appropriate actions are taken when non-compliance is identified.
Food Safety Inspection Service		
24601-0001-23	Implementation of the Public Health Information System for Domestic Inspection	Evaluate the progress of FSIS' implementation of the domestic inspection portion of PHIS.
24601-0004-31	FSIS Ground Turkey Inspection and Safety Protocols	Review the inspection of ground turkey, including sampling and testing protocols, to evaluate the effectiveness of the program.
Food and Nutrition Service		
27004-0001-22	States' Food Costs for the WIC Programs	Evaluate the factors that cause high average food costs and costs per participant reported for various states within the WIC program. We also plan to evaluate FNS oversight activities for monitoring program costs.
27401-0004-21	Food Nutrition Service's Financial Statements for Fiscal Years 2014 and 2013	Determine whether the financial statements present fairly, in all material aspects, in accordance with accounting principles.
27601-0001-41	National School Lunch and Breakfast Programs	Evaluate the methods FNS is using to lower the error rates for both the NSLP and the School Breakfast Program.
27601-0002-41	SNAP Error Rate	Determine whether FNS and the State agencies have adequate controls in place to ensure that SNAP error rates are accurately determined, the appropriate actions are taken to reduce the error rates, and errors are timely corrected when detected.
Animal and Plant Health Inspection Service		

AUDIT WORK CURRENTLY IN PROCESS		
Audit No.	Audit Title	Brief Objective
33601-0001-23	Plant Protection Quarantine Preclearance Program	Evaluate the controls and processes governing the Preclearance program.
33601-0001-41	APHIS Oversight of Research Facilities	Evaluate the adequacy of animal care inspections and the Institutional Animal Care and Use Committee's review of research facilities.
33601-0002-41	APHIS Wildlife Services - Wildlife Damage Management	Determine whether wildlife damage management activities were justified and effective.
Rural Business-Cooperative Service		
34601-0001-31	Rural Business-Cooperative Service (RBS) Grant Programs - Duplication	Evaluate RBS grant and loan programs administered by RD to determine if there is duplication.
Multi-Agency		
50601-0001-32	Controls Over APHIS' Introduction of Genetically Engineered Organisms	Determine whether APHIS has established adequate controls over the introduction of genetically engineered (GE) organisms. Assess controls to minimize the inadvertent release of GE organisms and provide reasonable assurance that movements and releases of GE organisms in the environment are in accordance with laws and regulations. Follow-up on recommendations made in a prior report.
50601-0001-41	RD Procurement Controls	Determine if goods and services were being procured efficiently and effectively.
50601-0003-31	USDA Beginning Farmers and Ranchers Programs	To evaluate the Department's activities related to beginning farmer and rancher benefits. In general, we will review whether the classification is being applied properly, whether the benefits of that classification are going to eligible participants and are not duplicated, and if outreach efforts for beginning farmers and ranchers are adequate.
50703-0002-10	Lessons Learned - American Recovery and Reinvestment Act of 2009, Roll-up of OIG Work Performed in USDA Agencies and Program Areas	Identify the crosscutting themes, lessons learned, and conclusions made by a majority of the work we performed on the Recovery Act. Highlight OIG and the Department efforts to improve USDA policy, procedures, and practices for all programs to ensure Federal funds are used effectively.

AUDIT WORK CURRENTLY IN PROCESS		
Audit No.	Audit Title	Brief Objective
		Rural Development
85401-0004-11	RD's Financial Statements for Fiscal Years 2014 and 2013	Determine whether the financial statements present fairly, in all material aspects, in accordance with accounting principles.

The following is a list of released audit reports, sorted by mission area.

Farm and Foreign Agricultural Services

Farm Service Agency (FSA)

Fiscal Year 2012 Farm Service Agency Farm Assistance Program Payments
Report 03401-0002-11
Issued July 2, 2013

OIG assessed whether the FSA properly recorded and supported payments made during fiscal year 2012 through its various farm assistance programs.

We determined that FSA did not properly record and adequately support all fiscal year 2012 FSA program payments. We identified errors related to 12 of the 80 FSA program payments in our statistical sample of farm assistance program payments FSA made in fiscal year 2012. These errors occurred primarily because FSA's internal controls over the Supplemental Revenue Assistance Payments (SURE) program's manual payment calculation process did not prevent the data errors from occurring. Personnel at county offices made errors when inputting the data into the manual workbook used to calculate the payments, and second-party reviewers did not identify these errors. FSA has agreed that these 12 errors resulted in improper payments of \$80,480, and has initiated or completed appropriate corrective actions for all errors. However, based on the results of these 80 sampled payments, we estimated that a total of about \$17 million of FSA's program payments were improper. Our review identified that FSA's rate of improper payments was 2.3 percent, an increase from the 1.4 percent rate we identified in an audit of payments FSA made in fiscal year 2011.

We recommend that FSA officials strengthen controls by emphasizing the importance of second-party reviews, and develop and implement a checklist to verify the integrity of SURE workbook inputs. FSA agreed with our recommendation.

Risk Management Agency

Controls Over Prevented Planting
Report 05601-0001-31
Issued September 3, 2013

The Risk Management Agency (RMA) administers the Federal Crop Insurance Program, which paid approximately \$4.6 billion in claims from producers who were prevented from planting insured crops from 2008 through 2011. OIG determined that RMA needs to improve the prevented planting provisions to be more cost effective; to encourage producers to plant a crop, where possible; and to make eligibility criteria more objective and clear. Specifically, we

found that, out of concern for covering a producer's preplanting costs in all cases, RMA set current prevented planting coverage levels above the percentages of guarantees that insureds needed to cover average preplanting costs. As a result, by establishing coverage levels that provided over \$480 million in potentially excessive payments, we believe that RMA inadvertently provided incentives to actively encourage prevented planting claims. Further, when RMA designed its policy for assigning a yield when a producer is prevented from planting a crop and opts to not plant a second crop, it may have misinterpreted whether being prevented from planting should impact certain insurance calculations. Under the current policy, producers planted a second crop on only 0.1 percent of prevented planting acres.

Also, we found that loss adjusters did not fully document and support eligibility for over \$43 million in prevented planting payments. RMA needs to improve its guidance to better hold approved insurance providers accountable and prevent acres that are regularly too wet for crop production from receiving prevented planting coverage.

RMA should bring prevented planting coverage levels and preplanting costs consistently in line for each crop. RMA should also seek guidance on whether it can assign a prevented planting yield for insurance calculation purposes when a second crop is not planted, and take action accordingly. Finally, RMA needs to improve its criteria for determining if acres are available for planting, and emphasize that the determination must be supported and verified. The agency generally agreed with our eight recommendations.

Financial Statements for Fiscal Years 2013 and 2012
Report 05401-0003-11
Issued December 12, 2013

Independent auditor KPMG audited Federal Crop Insurance Corporation /Risk Management Agency's (FCIC/RMA) financial statements for fiscal years 2013 and 2012 and issued an unmodified opinion, finding that FCIC/RMA's financial position and related budgetary concerns were presented fairly and in accordance with generally accepted accounting principles. Concerning FCIC/RMA's internal control structure over financial reporting, the auditor identified one significant deficiency in FCIC/RMA's estimated losses on insurance claims calculation. KPMG considered this to be a material weakness. FCIC/RMA generally acknowledged the significant deficiency discussed in this report and is implementing corrective action.

Commodity Credit Corporation

Financial Statements for Fiscal Years 2013 and 2012
Report 06401-0003-11
Issued December 5, 2013

CliftonLarsonAllen (CLA) audited the CCC's financial statements for fiscal years 2013 and 2012 and issued an unmodified opinion, finding that CCC's financial position and related budgetary concerns were presented fairly and in accordance with generally accepted accounting principles. Concerning CCC's internal control structure over financial reporting, the auditor identified two significant deficiencies in CCC's funds control and controls over child agency financial reporting. CLA considered the first significant deficiency to be a material weakness. CCC generally acknowledged the significant deficiencies discussed in this report and is implementing corrective action.

Foreign Agricultural Service (FAS)

Effectiveness of FAS' Recent Efforts to Implement Measurable Strategies
 Aligned to the Department's Trade Promotion and Policy Goals
 Report 50601-0001-22
 Issued March 29, 2013

OIG evaluated the FAS efforts to develop and implement measurable strategies and actions that are effectively aligned with the USDA's overall goals for trade policy and promotion. The Government Performance and Results Act requires each executive agency to create a strategic plan with outcome-related goals and objectives, and the Government Accountability Office recommends that agencies establish quantifiable performance measures in order to gauge progress. Although FAS recently updated its Strategic Plan to include measurable goals and objectives, these goals and objectives (which measure the dollar value of exports) do not present the whole picture of how FAS' actions are affecting the global market for American agricultural goods. FAS' measures are not outcome-based and do not show how the United States is performing in a given market compared to its competitors. OIG acknowledges that developing outcome-based performance measures for FAS' trade efforts is difficult, but we maintain that a change in U.S. market share is an outcome-based measure that would be of great use to policymakers.

Additionally, FAS has not updated its Country Strategy Statements (CSS), USDA's Global Market Strategy (GMS), or its corresponding performance measures in the Department's Performance and Accountability Report (PAR) to align with the goals and objectives contained in the new Strategic Plan. By working with the Department to improve measures that are reported in the PAR, FAS can increase transparency in USDA reporting and show how FAS, in reaching its goals, is contributing to USDA's overarching goal of increasing prosperity in rural communities.

FAS should refine its performance measures to contextualize changes in U.S. agricultural exports as part of U.S. market share in the global market place. FAS should also incorporate clear, outcome-based performance measures into the 2013 CSS, work with the Department to update the GMS to align with FAS and USDA strategic goals, and update the performance measures related to trade policy and trade promotion in Departmental planning and reporting documents. FAS agreed with all recommendations.

Recovery Act - Trade Adjustment Assistance for
 Farmers Program
 Report 50703-0001-23
 Issued October 18, 2013

OIG audited FAS, FSA, and the National Institute of Food and Agriculture's (NIFA) administration of the Trade Adjustment Assistance for Farmers (TAAF) Program and assessed the agencies' implementation of program requirements. The TAAF Program is administered by three agencies: FAS, the lead oversight agency; FSA, which approves producer applications and makes payments to producers; and NIFA, which provides training and technical assistance for producers. While we found that FAS reported information, such as the amount of funding spent, on Recovery.gov as required, we found issues with the remaining objectives: agencies did not have the appropriate controls in place to ensure that TAAF Program participants were eligible, payments were accurate, or oversight was sufficient. Specifically, FAS did not return

unobligated and unneeded fiscal year (FY) 2009 TAAF Program funds to the Treasury, which amounted to approximately \$65.1 million. Further, FAS granted a broad approval for all eligible producers of five commodities in specified counties or States, called price pre-certifications. However, we found that two price pre-certifications did not meet eligibility criteria because FAS did not sufficiently analyze documentation. As a result, 13 of 37 producers we reviewed did not individually show a price decline and received approximately \$64,600. FAS also did not effectively monitor or review FSA's administration of the program, which allowed 85 producers to receive approximately \$284,000 in benefits to which they were not entitled; however, we only identified approximately \$85,000 of these funds. Also, we found that NIFA did not ensure that the TAAF Program database was compliant with Federal information system security requirements.

FAS should review its financial accounts for unused funds. Further, if this program is funded after FY 2013, FAS should strengthen its eligibility process and perform ongoing oversight reviews. FSA should review the records of producers that refused submission to OIG, include the program as part of its annual review, and implement stronger controls over its manual override process. NIFA should immediately complete the certification and accreditation process for the program database and implement interim procedures until completed. FAS and FSA generally agreed with our recommendations. Initially, NIFA disagreed with our recommendations, but after subsequent discussions with OIG, NIFA agreed to implement procedures requiring certification and accreditation for future program databases.

Section 632(a) Transfer of Funds from USAID to USDA for Afghanistan
Report 50601-0002-16
Issued February 6, 2014

OIG evaluated FAS' monitoring and oversight controls over Section 632(a) funds for capacity-building projects in Afghanistan.

In June 2010, the U.S. Agency for International Development (USAID) transferred \$86.3 million to USDA for capacity-building activities in Afghanistan. OIG found that senior managers at FAS were aware of general control weaknesses in 2010 before first receiving the funding, and hired a consulting firm to review FAS processes for managing Section 632(a) funds from USAID. Although the firm identified several deficiencies in its report, issued in October 2010, FAS did not adequately implement corrective actions to strengthen its control environment before accepting the funds from USAID. Specifically, we found that FAS had not implemented performance monitoring plans for all projects until over two years after the first project began, which meant that FAS did not have adequate methods to monitor recipient accomplishment of program goals and objectives. Also, FAS did not finalize or implement a grant management structure that would facilitate effective monitoring of recipients' fund use. This occurred because FAS managers and senior officials did not clearly understand who was responsible for correcting control deficiencies and implementing recommendations. Additionally, FAS did not identify or adopt procedures from its other program areas to assist in the monitoring and oversight. Without adequate management controls in place, FAS cannot effectively monitor Section 632(a)-funded projects in Afghanistan, and faces difficulty in providing adequate assurance that the funds are effectively accomplishing program goals. We did not identify any instances where transferred funds were not used in accordance with the Memorandum of Agreement or the cooperative agreement.

We recommended that FAS forego accepting further Section 632(a) funds until it has fully implemented a formal monitoring and evaluation process and a grants management structure. FAS also needed to implement the recommendations outlined in the consulting firm's review. FAS generally agreed with all recommendations.

Food, Nutrition, and Consumer Services

Food and Nutrition Service

Recovery Act Performance Measures for the
Supplemental Nutrition Assistance Program
Report 27703-0002-22
Issued March 28, 2013

OIG initiated this audit to determine whether FNS performance measures effectively measured its achievement in accomplishing the SNAP Recovery Act goals.

FNS, with USDA and OMB approval, implemented four performance measures to evaluate its implementation of the Recovery Act for SNAP. However, we found these measures were not designed to effectively evaluate how the additional funding achieved the Recovery Act goals of assisting those most impacted by the recession, stabilizing State government nutrition program budgets for essential services, and stimulating the economy. Two of the four measures also appear in the Department's Strategic Plan for fiscal years (FYs) 2010 through 2015, which will remain in effect after Recovery Act funding ends. FNS officials explained that they selected the four performance measures because OMB urged agencies to use measures they were already using for regular operations. FNS believed the Recovery Act goals naturally aligned with its pre-existing program goals for SNAP. However, according to OMB, it is ultimately FNS' responsibility to develop and report on performance measures that provide transparency to enable the American public to see the results of their investment from Recovery Act funding.

Specifically, we found three of the four measures did not measure outcomes that assessed how well the additional funds achieved the Recovery Act goals. Instead, three of these performance measures reflected outputs, such as the dollar amount of benefits issued and administrative costs expended. The one outcome performance measure, which deals with food insecurity, did not directly measure the impact of Recovery Act funds, because it did not measure how well SNAP assisted those most impacted by the recession. As a result, FNS had not assessed or reported on the use of the approximately \$45.5 billion in additional SNAP funds to show the American taxpayer, in terms of the established goals, what was received for the Recovery Act investments.

We recommended that FNS establish outcome-based performance measures for SNAP in the USDA Strategic Plan. However, FNS stated that they cannot define outcome measures specific to SNAP, because of the complexity of measuring program impacts on participants. We accepted FNS' management decision.

Vendor Management in the Special Supplemental Nutrition Program for Women,
Infants, and Children
Report 27601-0038-Ch
Issued March 29, 2013

OIG audited FNS' controls over vendor management and participant eligibility in WIC.

OIG found that FNS management evaluations (MEs) did not identify and correct significant issues in the vendor management processes at two State agencies operating WIC. These agencies lacked sufficient controls to track vendor violations for 42 vendors (2 in Illinois and 40 in Florida), and ensure timely and appropriate sanctions. As a result, these vendors were not disqualified, as required, and could redeem an estimated \$6.6 million in WIC benefits during their required periods of disqualification. Also, the Florida State agency did not conduct compliance investigations on 24 of its 35 high-risk vendors, and did not treat smaller vendors in an equitable manner with large chain stores. These deficiencies could allow vendor violations, including excessive charges and the sale of unauthorized food items, to go undetected.

We also found that the Illinois State agency did not disqualify 3 of the 11 WIC vendors that were also disqualified from SNAP during a 3 year period. If these vendors are not disqualified, we estimate that they could redeem approximately \$51,000 in WIC food instruments that they are not authorized to redeem.

We concluded that the Michigan State agency properly monitored vendors. We note that Michigan uses an EBT system, while Illinois and Florida still use paper food instruments. Michigan's system uses the same device to process SNAP and WIC food instruments and removes it when a vendor is disqualified from one program—thereby ensuring reciprocal disqualification.

FNS should perform an assessment of its ME process, and periodically reassess and update its ME guidance. FNS should also require that the State agencies disqualify the violating vendors we identified, require that they strengthen their controls over vendors, and require the timely reciprocal disqualification of WIC vendors that have been disqualified from SNAP. FNS agreed to the recommended corrective actions.

Overlap and Duplication in Food and Nutrition Service's Nutrition Programs
Report 27001-0001-10
Issued June 13, 2013

OIG assessed the FNS nutrition programs to identify potential overlap and duplication.

OIG identified that the potential for overlap and duplication exists among FNS' 15 nutrition programs, and determined that FNS may be duplicating its efforts by providing participants total benefits in excess of 100 percent of daily nutritional needs when households and/or individuals participate in more than one FNS program simultaneously.

Over the years, Congress has directed FNS to establish a variety of separate nutrition assistance programs, with a variety of purposes, objectives, and client bases. With the growing rate of food insecurity among U.S. households and significant pressures on the Federal budget, it is important to understand how food assistance programs complement one another as a safety net, and how services from these 15 individual programs may be inefficient, due to overlap and duplication. FNS, working with Congress and through the budget process, has made attempts to obtain efficiency in its nutrition assistance programs. However, FNS has not performed overarching assessments

to evaluate how effectively and efficiently the programs operate together as the Nation's nutritional safety net. OIG concluded that FNS could potentially achieve cost savings by taking actions to eliminate duplication and overlap in its nutrition assistance programs. However, FNS contends that such an assessment would be costly. Since FNS could not quantify the cost, the agency should determine the resources that would be required to conduct such a study. Then, FNS should determine whether it has the resources to conduct the study or whether additional appropriated funding will be required. While FNS believes that the network of nutrition assistance programs that make up the national nutritional safety net reflects Congress' recognition of a diversity of needs, FNS generally agreed with our recommendations.

We recommended that FNS determine and document the requirements for conducting a study, to identify and determine the extent to which overlap and duplication may exist in FNS' nutritional assistance programs. We also recommended that FNS determine whether it has the resources necessary to conduct the assessment of the potential overlap of its nutrition programs or whether additional funding will be necessary to complete the assessment. FNS agreed with these corrective actions and is working to implement them.

Recovery Act Impacts on SNAP Phase II
Report 27703-0001-22
Issued June 13, 2013

OIG reviewed FNS' internal controls for Recovery Act SNAP administrative funding to ensure that funds were spent for allowable costs, in accordance with applicable requirements.

The Recovery Act provided additional funds for SNAP administrative costs. OIG found that while FNS made Recovery Act administrative funds available timely for States to use, FNS did not provide adequate accounting guidance, coordination, and oversight to ensure States fully complied with transparency and accountability requirements.

Four of six reviewed States did not separately account for Recovery Act funds for SNAP administrative expenditures. State officials indicated they either did not fully understand the accounting requirements or believed them too cumbersome. Although FNS did provide instruction on how to report Recovery Act funds used, it did not provide adequate guidance to assist States in how to maintain separate identity of Recovery Act expenditures. Also, FNS' Financial Management Review process did not disclose that States were unable to comply with transparency requirements. Due to the lack of separate accounting, we were unable to gather sufficient evidence in accordance with generally accepted government auditing standards to conclude on the propriety of State uses of Recovery Act SNAP funds for administrative costs.

We also found that two States used funds from one fiscal year to pay for expenses incurred in a different fiscal year, and a third State used funds after the obligation periods had expired. In addition, one county inappropriately used funds for payroll costs not associated with SNAP. As a result, we identified \$470,272 in unallowable expenditures that should be recovered. FNS agreed with our recommendations.

Controls for Authorizing Supplemental Nutrition Assistance Program Retailers
Report 27601-0001-31
Issued July 31, 2013

In light of news articles on SNAP trafficking, OIG audited the controls that FNS uses for authorizing, reauthorizing, and disqualifying retailers that participate in SNAP.

OIG found that FNS does not have clear procedures and guidance to carry out key oversight and enforcement activities to address SNAP retailer fraud, or adequate authority to prevent multiple instances of fraud—either by a particular owner or within a particular location. In addition, FNS regional offices put their limited resources towards other activities, such as retailer authorization, rather than assessing and enforcing retailer penalties. These issues occurred because FNS has not yet comprehensively updated its regulations and guidance to reflect the changed fraud risks that accompanied the transition from a stamp-based benefit system to the Electronic Benefit Transfer (EBT) system. This has led to a retailer authorization process without clear roles and responsibilities for different FNS divisions, inadequate supervisory reviews, and fragmented access to important documents. Finally, FNS does not require retailers to undergo self-initiated criminal background checks. Although FNS has recently taken several steps to strengthen oversight—such as creating new policy for high-risk retailers and increasing denial rates for business integrity issues—without a proper authorization framework, we found that problems often went undetected or unaddressed.

As a result, the integrity of SNAP is at risk because FNS does not consistently provide deterrents for trafficking. From a sample of 316 locations, we found that FNS did not properly determine potentially \$6.7 million in penalties, and authorized 51 ineligible store owners, who redeemed over \$5.3 million in benefits since 2006. In addition, we identified 586 owners allowed to continue participating in SNAP at other locations after being permanently disqualified and 90 retail locations that had two or more firms permanently disqualified.

OIG recommended that FNS should comprehensively review its policies and procedures, seek legislative change to retain a portion of retailer penalties, require background checks for retailers, strengthen internal guidance, make improvements to its automated retailer data system, create and strengthen safeguards for high-risk stores, and require more supervisory reviews. FNS should also review the owners we identified to determine if they need to be penalized or disqualified from SNAP. OIG accepted management decision on 12 of the 20 recommendations; however, further action from the agency is needed before management decision can be reached for the other recommendations.

Food and Nutrition Service's Financial Statements for Fiscal Years 2013 and
2012
Report 27401-0003-21
Issued December 6, 2013

OIG performed the annual audit of FNS' financial statements for fiscal years 2013 and 2012.

FNS received an unmodified opinion from OIG's audit of the FNS consolidated financial statements. We determined that the agency's financial statements for the Fiscal Years 2013 and 2012 present fairly, in all material respects, FNS' financial position as of September 30, 2013 and 2012, and that they conform with accounting principles generally accepted in the United States of

America. This includes the agency's net costs, changes in net position, and statements of budgetary resources.

Our consideration of FNS' internal control over financial reporting identified no significant deficiencies or material weaknesses. However, our consideration of compliance with laws and regulations noted an instance of noncompliance with the Improper Payments Elimination and Recovery Act of 2010. This report did not include any recommendations.

Food Safety

Food Safety and Inspection Service

FSIS *E. coli* Testing of Boxed Beef Report 24601-0003-31 Issued March 22, 2013

OIG audited FSIS to determine how effectively the agency was testing boxed beef items that downstream processors used for ground beef production.

OIG found that FSIS needs to re-evaluate its *E. coli* testing methodology, as it relates to the downstream processing of boxed beef products. FSIS tests product designated as ground beef or likely to become ground beef, but they do not sample all boxed beef product. Some downstream processors grind such boxes of unsampled cuts of beef without sampling it for *E. coli* prior to grinding. Similarly, "retail exempt establishments"—grocery stores, butcher shops, etc.—potentially grind their own ground beef; but unlike Federally inspected plants, FSIS does not sample and test bench trim at these establishments for *E. coli*. FSIS does have a program for periodically testing the final ground beef products at downstream processors and retail exempt establishments before it enters commerce. Also, FSIS is not testing tenderized meat products for *E. coli*, despite several recent recalls.

FSIS has recently transitioned to its new Public Health Information System (PHIS), which relies, in part, on correct profile information to accomplish such tasks as sending inspectors *E. coli* sampling requests. However, we found some establishments had incorrect profile information, resulting in incorrect requests for sampling. This profile error caused FSIS not to sample one establishment's "other ground beef components" for over 4 years. However, FSIS did sample the ground product before it left the plant.

Lastly, not all plants we reviewed had adequate records for tracing source material back to the originating slaughter establishment. Such information is crucial during a recall.

We recommended that FSIS take additional steps to ensure that beef to be ground throughout the production process—from Federally inspected slaughter establishments to local grocery stores—be subject to FSIS sampling and testing for *E. coli*. The agency agreed with all 12 recommendations.

FSIS—Inspection and Enforcement Activities at Swine Slaughter Plants Report 24601-0001-41 Issued May 9, 2013

OIG performed this audit to identify areas of risk in the FSIS inspection of swine plants, evaluate FSIS' controls over food safety and humane handling, and determine if appropriate enforcement actions were taken against plants

that violated the Federal Meat Inspection Act (FMIA) and the Humane Method of Slaughter Act (HMSA).

OIG found that FSIS' enforcement policies do not deter swine slaughter plants from becoming repeat violators of FMIA, which resulted in plants that repeatedly violated the same regulations with little or no consequence. In 8 of the 30 plants we visited, inspectors did not always examine the internal organs of carcasses in accordance with FSIS inspection requirements, or did not take enforcement actions against plants that violated food safety regulations. As a result, there is reduced assurance of FSIS inspectors effectively identifying pork that should not enter the food supply.

OIG also found that FSIS inspectors did not take appropriate enforcement actions at 8 of the 30 swine slaughter plants we visited for violations of the HMSA. We reviewed 158 humane handling noncompliance records (violations) issued to the 30 plants and found 10 instances of egregious violations where inspectors did not issue suspensions. As a result, the plants did not improve their slaughter practices, and FSIS could not ensure humane handling of swine.

In addition, FSIS could not determine whether the goals of their pilot program-Hazard Analysis and Critical Control Point (HACCP)-based Inspection Models Project (HIMP)-were met because FSIS did not adequately oversee the program.

FSIS needs to develop a strategy to take progressively stronger enforcement actions against plants with serious or repetitive violations. FSIS should determine what measurable improvement the HIMP program achieved and its suitability as a permanent program. FSIS should also provide a plan on how it will minimize reliance on the inspectors' judgment to ensure they consistently enforce laws. FSIS concurred with all of our recommendations.

FSIS' and AMS' Field-Level Workforce Challenges

Report 50601-0002-31

Issued July 31, 2013

OIG reviewed how FSIS and the AMS manage their workforces-employees responsible for inspecting and grading food products -at a time when restricted budgets may impair the agencies' ability to carry out their missions.

OIG found that FSIS and AMS generally managed their workforces effectively, but improvements were needed. OIG found that FSIS inspectors often worked far more hours than their AMS colleagues, a situation that could impair food safety. Both agencies could improve how they monitor or bill industry for their services. FSIS could not adequately reconcile reimbursable overtime charges to industry with the overtime recorded by field staff in its timekeeping system, which could potentially have resulted in up to an estimated \$10.6 million in under-billed overtime and up to an estimated \$4.7 million in overcharges to industry. AMS was unable to charge industry up to an estimated \$40,000 in monthly interest on overdue accounts.

Recently, AMS has allowed some beef plants to use an automated, camera-based system for grading meat. While the cameras can help AMS use its staff efficiently, we question if the new system was established in a way that is objective and transparent to all stakeholders. Additionally, both AMS and FSIS could also work to improve their succession planning to better reflect

the best practices of the Federal government. Since AMS graders and FSIS inspectors often work in the same plants, the two agencies have a memorandum of understanding in place to cross-utilize their personnel. We found that the agreement was out-of-date and needed to be revisited.

OIG recommended that both AMS and FSIS improve how they manage overtime and billing of industry, plan for workplace succession, and cross-utilize each other's human capital resources. For AMS, we recommended that it take steps to improve its camera grading system and make the system transparent to the public. The agencies generally agreed with our recommendations, and we were able to reach management decision on all recommendations.

Marketing and Regulatory Programs

AMS

National Organic Program-Organic Milk Operations Report 01601-0002-32 Issued July 15, 2013

OIG reviewed how AMS, through the National Organic Program (NOP), implemented the access to pasture rule for organic dairy cattle.

OIG generally found that AMS successfully implemented the access to pasture rule as part of its NOP, but we did identify several areas where the agency could make improvements.

We noted that NOP officials had not clearly defined how producers should demarcate herds of organic milk-producing cattle, which meant that some certifying agents allowed producers to add cattle to organic herds (once a conventional dairy herd is converted (transitioned) to organic, all dairy animals added to the herd must have been born to an organically-managed cow). We also noted that the NOP needs to include organic feed brokers within the NOP certification process to ensure that organic feed is not commingled or contaminated. Also, certifying agents conducting yearly inspections of organic milk operations did not take consistent enforcement actions when their inspectors or reviewers identified possible noncompliance issues with Department of Agriculture (USDA) organic regulations. Finally, we found that smaller operations were often unaware of recordkeeping requirements of the access to pasture rule regarding livestock confinement, grazing, or the cattle's dry matter intake.

We recommended that guidance for certifying agents be improved to ensure that all organic dairy producers are being treated consistently and ensure that all aspects of organic milk production are complying with USDA organic requirements. AMS concurred with all of the recommendations.

AMS Oversight of the Beef Promotion and Research Board's Activities Report 01099-0001-21 Issued January 28, 2014

OIG reviewed AMS' and the beef board's procedures designed to monitor activities related to the beef checkoff program. OIG also examined the internal controls related to beef checkoff fund transactions.

Overall, we concluded that AMS' oversight as an internal control function needs improvement. In our view, this resulted in agency officials having

reduced assurance that beef checkoff funds were collected, distributed, and expended in accordance with the Beef Research and Information Act, as amended, and the Beef Promotion and Research Order. We found that AMS had not conducted periodic management reviews of the beef board, and the agency's procedures for conducting these reviews could be improved.

AMS needs to develop and implement oversight procedures specific to the beef board and perform management reviews of the beef checkoff program. OIG also recommends that the beef board require detailed estimates of project implementation costs. AMS has agreed with our recommendations.

Natural Resources and Environment

NRCS

Recovery Act -NRCS' Emergency Watershed Protection Program
Floodplain Easements Field Confirmations
Report 10703-0005-KC
Issued March 14, 2013

OIG evaluated NRCS floodplain easement program activities to assess the agency's use of Recovery Act funds to restore and enhance floodplains.

OIG determined that NRCS needs to address four issues related to the floodplain easement component of its Emergency Watershed Protection Program. We found that NRCS did not always: target funds to those easements most consistent with program goals, require that documentation supported eligibility determinations, ensure easements were maintained consistent with program goals, and compensate landowners appropriately.

NRCS acquires easements from owners of floodplain lands to gain authority to take measures to restore and enhance the floodplain's function and values. Without a clear definition of "natural conditions" in the program manual, however, personnel did not always develop restoration plans adequately and ensure the restoration of floodplain functions and values to the greatest extent practicable. Further, NRCS did not always develop and maintain documents to support its determinations that offered lands were eligible and its decisions to prioritize among applications. Additionally, NRCS did not provide adequate guidance to landowners regarding program rules, such as actions prohibited on easements; as a result, land was not always maintained in a manner consistent with the program goal of restoring floodplains to a natural condition. Finally, NRCS compensated five landowners in our sample improperly, with errors totaling \$139,474. NRCS generally agreed with our findings and recommendations.

Recovery Act - NRCS' Emergency Watershed Protection Program Floodplain
Easements and Watershed Operations Effectiveness Review
Report 10703-0001-31
Issued March 14, 2013

For the last stage of reviews of the Recovery Act's funding for NRCS' Watershed Operations and Floodplain Easements programs, OIG examined program effectiveness, including whether the agency met performance goals.

OIG determined that NRCS needs to establish outcome-oriented performance measures that it can use to gauge the effectiveness of its Watershed Operations and Floodplain Easements programs. While the agency established

output-oriented measures to track progress, we determined that these measures do not provide adequate information on how effective the programs were at accomplishing the goals of the Recovery Act, which include creating jobs, assisting those most impacted by the recession, and investing in environmental protection. NRCS has not fully demonstrated to the public the extent to which it is accomplishing the objectives of the Recovery Act and is hampered in fully gauging the outcomes of these programs. In addition, NRCS did not allow the use of appraisals to determine the value of properties with structures it acquired through the Floodplain Easements program, which led to the purchase of some properties at prices in excess of the established value. NRCS increased the amount of accepted easement offers, which overcompensated the landowners for seven easements with structures in one State we reviewed. Increasing the payment for these easements by a total of \$231,100 prevented NRCS from using the funds to help maximize the number of acres enrolled and restored with Recovery Act funds.

OIG recommended that NRCS establish additional outcome-oriented performance measures to track its success in meeting the objectives of the funding it receives. We also recommend that the agency require appraisals of structures to be acquired and establish controls to ensure easement payments do not exceed accepted offers. The agency agreed with all of our recommendations.

Recovery Act - Rehabilitation of Flood Control Dams
Report 10703-0001-At
Issued March 25, 2013

OIG audited NRCS to determine if Recovery Act funds for the Watershed Rehabilitation Program were used effectively to rehabilitate aging flood control dams.

As part of the Recovery Act, NRCS selected 27 dam rehabilitation projects to receive \$44.8 million in funding through the Watershed Rehabilitation Program, which assists sponsoring local organizations in rehabilitating high-hazard, aging flood control dams. OIG determined that, while NRCS was generally effective in implementing controls to monitor Recovery Act funds, it did not take necessary steps to inform OMB, USDA, or the public of key information regarding the projects, or to implement OIG's recommendations from a prior audit.

Specifically, NRCS did not accurately communicate to USDA and OMB the readiness of the selected projects and the impact of Recovery Act requirements on the program, which, by design, is not well suited to meet the accelerated timeframes and unique challenges posed by the Recovery Act. As a result, NRCS obligated \$10.2 million and spent almost \$943,000 on 8 projects that did not meet Recovery Act goals and, therefore, could not be completed. Funds allocated to these projects had to be deobligated or allocated to other projects. NRCS was able to reallocate \$7.9 million from 7 projects to the remaining 19 Recovery Act dam rehabilitation projects. NRCS missed the Recovery Act deadline and an opportunity to use \$1.4 million of Recovery Act funds to help the U.S. economy during the recession. Additionally, NRCS did not ensure that websites had complete or accurate information on watershed rehabilitation projects—such as project certifications and updated information about the 27 projects and their funding. Finally, NRCS has not fully corrected deficiencies with its dam inventory and cost monitoring tools that OIG identified in a prior audit. We have reached management decision on our five recommendations.

Administration of Easement Programs in Wyoming
Report 10099-0001-31
Issued September 27, 2013

OIG performed a review and determined that, while NRCS State office in Wyoming did not fraudulently process easements, NRCS needs to strengthen its accountability and oversight of easement programs.

In February 2013, after learning that the Wyoming State office disregarded policy requirements, as well as specific written instructions from NRCS' national office and the Office of the General Counsel not to proceed with processing several Wetlands Reserve Program easements, NRCS conducted a functional review of the Wyoming State office's administration of the Farm and Ranch Lands Protection Program, Grassland Reserve Program, and Wetlands Reserve Program. NRCS then requested that OIG review the Wyoming State NRCS office's administration of easement programs. Specifically, NRCS expressed concerns over potential employee misconduct and the causes of other serious issues noted in its functional review.

While we did not note any indication of fraud or purposeful misconduct, we found that NRCS needs to ensure that its employees are sufficiently knowledgeable to carry out their duties, and to strengthen oversight and accountability of employees' work. Specifically, both the program specialists responsible for processing these easements and the officials responsible for supervising the employee demonstrated a lack of critical program knowledge. We also found that NRCS did not have an adequate system of review in place to ensure that employees were properly reviewed and held accountable. As a result, the Wyoming State office approved at least \$14.1 million in easements that were not correctly processed and did not ensure that the Government's interest in the easements would be served and secured. OIG recommended that the NRCS national office should increase its oversight over State offices' administration of easement programs through revising its current processes or establishing a process through which State offices have their easement approval and administrative activities periodically reviewed. Additionally, NRCS should take appropriate administrative or disciplinary action and complete corrective action to address the deficiencies identified in the functional review report. Until these actions are completed, the Wyoming State office's easement program and budget authorities should be withheld. NRCS agreed with our finding and accepted all seven recommendations.

Financial Statements for Fiscal Year 2013
Report 10401-0003-11
Issued December 9, 2013

KPMG LLP audited NRCS' financial statements for fiscal year 2013 and issued a disclaimer of opinion. KPMG LLP reported that NRCS was unable to provide sufficient evidential matter in support of certain transactions and account balances, as presented in the NRCS financial statements as of and for the year ended September 30, 2013, particularly with respect to beginning net position balances and current year activity; obligations incurred, including accrued expenses and undelivered orders; real and personal property; recoveries of prior year unpaid obligations; advances to others; accrued revenue, accounts receivable, and unfilled customer orders. NRCS was unable to complete corrective actions and make adjustments, as necessary, to these and other financial statement amounts prior to the contractually required completion date of the engagement. As a result of these limitations, KPMG

LLP was unable to obtain sufficient evidential support for the amounts presented in the fiscal year 2013 financial statements.

Forest Service

Management of Oil and Gas Resources on National Forest System Land
Report 08601-0001-21
Issued March 12, 2013

OIG reviewed how FS is cooperating with the Department of the Interior (DOI) to expedite the approval of oil and gas leases and operations on National Forest System (NFS) lands. Rising energy prices have increased interest in the exploration and development of domestic oil and gas resources, some of which are found beneath public lands within national forests. When oil and gas companies apply to drill on NFS land, FS works with the Bureau of Land Management (BLM) in DOI to regulate their operations. BLM receives lease nominations, issues and administers all Federal leases, and monitors all drilling and production activities, while FS accepts and processes lease nominations, authorizes the use of forest land for oil and gas operations, and monitors surface disturbance and reclamation.

OIG found that the two agencies need to improve how they work together, so that oil and gas lease nominations and operations are approved expeditiously. Despite the existence of a Memorandum of Understanding, established as a result of the Energy Policy Act of 2005, most of FS' communication with BLM has been informal—when problems obstructing cooperation occurred, they were not resolved. The two agencies also need to better track information, such as the number of days for nominated parcels to be processed, as we found that deadlines were often missed. We also found that FS could not validate whether all well sites were being inspected annually, as required.

Permitting oil and gas drilling on NFS lands does pose an environmental risk, but FS does not require operators to submit a spill plan that would ensure that operators are prepared to quickly respond to any spills. Finally, OIG noted that FS established performance measures to assess the work done in the program, but those measures did not clearly record the outcomes of key program activities. As a result, FS officials were not receiving the data needed to make appropriate program decisions and were unable to determine which program activities were not performed timely.

We recommended that FS coordinate with BLM to expedite approval of lands, use BLM systems to track inspections, develop spill response plans, and revise performance measures. FS agreed with our recommendations.

Performance Measures for Recovery Act Projects
Report 08703-0001-41
Issued March 28, 2013

OIG reviewed FS contracts and agreements to determine if it implemented performance measures in accordance with guidelines and timely reported them for transparency purposes. OIG found that FS implemented performance measures that generally met the goals of the Recovery Act; however, we found FS field staff did not timely or accurately report the agency's Recovery Act accomplishments by the final cutoff date for six of the seven key performance measures selected for our review. This occurred because some field staff had competing priorities that superseded entering the accomplishment data into the tracking systems. Some field staff also made inadvertent data entry

errors. As a result, FS misreported its accomplishments for 68 of 122 contracts and agreements we reviewed and did not fully meet the Recovery Act's transparency objective. FS generally agreed with our findings and reinforced with its staff the importance of timely data entry. Since Recovery Act funds ceased to be available for new obligations as of September 30, 2010, we made no recommendations.

Recovery Act Hazardous Fuels Reduction and Ecosystem Restoration Projects on
Non-Federal Lands
Report 08703-0005-SF
Issued March 28, 2013

This report provided a comprehensive look at the issues identified during OIG's audit of FS' controls over Recovery Act funds for wildland fire management (WFM) projects on non-Federal lands. FS allocated Recovery Act grants for WFM activities, such as hazardous fuels reduction, forest health, and ecosystem improvements. Overall, we found that FS lacked the necessary controls to ensure that the grant funds were both properly accounted for and used for their intended purpose—not just for Recovery Act grants, but for the entire grant program. We also found that FS did not enhance its existing controls, despite the Recovery Act's requirements for greater transparency and accountability. As a result, the grant recipients we reviewed charged a total of \$92 million in unallowable and questionable costs to both Recovery Act and non-Recovery Act grants. Of this total, \$63 million came from grant recipients without adequate financial controls and processes, while \$29 million stemmed from FS and other entities' lack of adherence to the Recovery Act's objectives. We also found that FS staff did not take necessary steps to ensure that it met the Recovery Act's overall objective of maximizing job creation and retention in the most cost effective manner possible.

OIG issued a series of 10 Fast Reports during the course of the audit to further strengthen FS' controls over future grants and address unallowable or questionable costs. OIG found that FS should strengthen its overall grant administration by taking such actions as improving training and clarifying staff responsibilities. To address significant deficiencies in grantee and sub-grantee accounting processes, FS should enhance its monitoring efforts. FS should also recover \$27.5 million in unallowable costs charged to the grants, follow up on an additional \$33.6 million, and halt reimbursements to entities with persisting control weaknesses. OIG also identified several ways for FS to better ensure compliance with the Recovery Act. FS generally concurred with all of our recommendations.

Financial Statements for Fiscal Years 2013 and 2012
Report 08401-0003-11
Issued December 9, 2013

Kearney & Company, P.C. audited Forest Service's financial statements for fiscal years 2013 and 2012 and issued an unmodified opinion, finding that Forest Service's financial position and related budgetary concerns were presented fairly and in accordance with generally accepted accounting principles.

Research, Education, and Economics

Agricultural Research Service (ARS)

Contract Closeout Process (Recovery Act)

Report 02703-0001-12
Issued August 14, 2013

OIG assessed ARS's procedures for closing out contracts funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act). ARS used these funds to award 134 contracts for repairs to critical systems at its research facilities. Through reviews of eight contracts, OIG found that ARS timely identified funds on physically completed contracts that could be put to better use. ARS did not allow any funds to expire and obtained the proper releases from the contractors. Further, ARS took additional measures to ensure that Recovery Act goals related to transparency and accountability were met.

However, our review disclosed that ARS should strengthen the effectiveness and efficiency of its controls for closing out contracts. For example, ARS' acquisition oversight did not ensure that it properly and timely implemented processes for evaluating contractor performance and sharing information among the Federal acquisition workforce. Also, it did not ensure it achieved desired outcomes, such as the completion of contract closeout, within a 6-month period. This occurred because ARS lacked adequate management oversight over the contract closeout process to ensure that related contracting activities met intended goals. As a result, the Federal procurement workforce lacks necessary information about ARS' contractors' performance, which may result in the selection of a contractor that ARS identified as not performing satisfactorily. Also, ARS cannot confirm that it always closes out contracts in a timely manner, and we cannot state that ARS has effectively taken needed actions to improve its procurement processes.

ARS should take actions related to its internal reviews of the procurement process and develop its guidance for documenting that contracts are consistently and timely closed out. ARS also needs to complete its implementation of a contractor evaluation database used across the Federal government, and strengthen its oversight of the contract closeout process. ARS agreed with our recommendations.

Rural Development

Rural Business-Cooperative Service

Recovery Act-Business and Industry
Guaranteed Loans-Phase 3
Report 34703-0001-32
Issued March 29, 2013

OIG assessed Recovery Act-funded Business and Industry (B&I) loans that RD guarantees to determine whether loans were properly serviced, funds were used properly, and the program met performance goals.

OIG determined that the controls RD has in place should be strengthened to ensure that lenders receiving Recovery Act-funded B&I loan guarantees complete all servicing actions and correctly report data used to determine program performance. Specifically, lenders are not properly servicing Recovery Act-funded B&I guaranteed loans, and RD State office personnel are not adequately monitoring the loan servicing. Based on issues identified with 37 of 53 loans in our statistical sample, we estimate that lenders did not correctly service 72 percent of the loans in the audit universe. In addition, RD did not adequately monitor the lenders of 33 of the 53 loans, or

64 percent of the loans in the audit universe. As a consequence, there is a greater risk that problem loans are going undetected. In addition, the use of loan proceeds could not always be verified to ensure the funds were used for authorized purposes or in accordance with program requirements and loan agreements.

Furthermore, the agency does not have a well-defined process in place to ensure that data on jobs created and saved are collected in a consistent manner and the percentage of small business participation is accurately determined. Because of issues with the agency's guidance regarding these processes, the agency's success in meeting its established performance goals may be overstated.

RD should develop and implement guidance, regulations, and comprehensive training related to servicing actions, documentation, small business determinations, and job reporting. The agency should also take specified actions to monitor and verify lender servicing and conduct any borrower visits that have not yet been performed. RD generally agreed with our recommendations.

Rural Utilities Service (RUS)

Controls Over Recovery Act Water and Waste Loans and Grants Expenditures and Performance Measures Report 09703-0001-22 Issued March 26, 2013

OIG evaluated RUS's Recovery Act performance measures and controls over expenditures for Water and Waste Disposal System (WWD) loans and grants to assess whether the agency used Recovery Act funds to achieve Recovery Act goals.

OIG determined that RUS designed and implemented performance measures for WWD loans and grants that effectively measured how RUS used Recovery Act funds to achieve Recovery Act goals. We evaluated the performance goals, which aimed to, for instance, reduce the rural population's exposure to water-related hazards, and to save or create 56,000 jobs. Based on our evaluation, we concluded that these goals adequately measured RUS' achievements in meeting both Recovery Act and WWD program objectives. We found that RUS had an effective system for gathering data specific to the reported measures and could reasonably ensure reporting was proper.

We also assessed controls over project expenditures and concluded that they were reasonably effective to ensure that RUS used Recovery Act funds to complete projects as intended. However, our review disclosed that RUS needs to improve controls over grant funds remaining after projects are complete. Specifically, we identified a borrower with multiple WWD projects who improperly transferred grant funding from one completed project to another project, which is prohibited. This occurred due to weaknesses in controls for deobligating funds remaining after projects are completed, and also because RD does not currently track project expenditures at the national level. The transferred \$158,252 was part of \$454,355 in grant funding that remained inactive for a period of more than 2 years, while a backlog of other WWD projects waited for funding.

We recommended that RUS should develop guidance and train staff on how to close obligations and conduct unliquidated obligations reviews. RUS should

also develop tools to track inactive projects and return approximately \$454,355 in inactive and improperly spent funds to the Department of the Treasury. RUS agreed with our recommendations.

Recovery Act Broadband Initiatives Program - Pre-Approval Controls
Report 09703-0001-32
Issued March 29, 2013

OIG statistically sampled and reviewed 86 approved Broadband Initiatives Program (BIP) applications to test the application process, which totaled \$783.9 million of about \$3.5 billion in program-level Recovery Act funding allocated to BIP. We found that RUS complied with the provisions of the Recovery Act in how it implemented the program and we did not question the eligibility of any RUS-funded BIP projects in our sample. Additionally, we determined that RUS took action to address prior audit recommendations relating to BIP, that controls over contractor reviews of applications were adequate, and that coordination with the National Telecommunications and Information Administration and the Federal Communications Commission was adequate. However, we did find that RUS funded BIP projects that sometimes overlapped preexisting RUS-subsidized providers and approved 10 projects, totaling over \$91 million, even though the proposed projects would not be completed within the 3-year timeframe RUS established and published. We also found that the agency could have implemented the program so that it would have focused more exclusively on rural residents who do not already have access to broadband. Generally, we recommended that, for future programs, RUS avoid funding broadband projects in areas that are already served by RUS-subsidized providers, publish and follow clearly defined project completion expectations, and focus broadband funding on rural areas that do not have access to this technology.

RUS did not agree with OIG's opinion on how certain aspects of BIP were carried out and stated that RUS developed processes that met the intent of the Recovery Act to promote rural economic development by bringing broadband service to underserved areas of rural America. However, OIG and RUS have subsequently agreed on corrective actions for the report's recommendations.

Recovery Act Broadband Initiatives Program Post-Award Controls
Report 09703-0002-32
Issued August 22, 2013

OIG reviewed how RUS administered and measured the outcome of about \$3.5 billion in Recovery Act program-level funding to provide sufficient access to high-speed broadband service to facilitate rural economic development. With the passage of the Recovery Act, Congress authorized RUS' BIP to help bring broadband to rural areas of the United States, where residents might otherwise not have access to this important technology.

OIG reviewed 247 advances, totaling \$146,446,113 for 86 sampled awards, and concluded that RUS' advances of BIP funds were generally supported. However, we did find that, while BIP primarily financed last mile projects that provide service to end-users such as households and businesses, RUS does not have adequate controls to measure and transparently report how effectively BIP is meeting its subscribership goals. Additionally, RUS administered the program differently than as outlined in the Notice of Funds Availability (NOFA), such as allowing awards composed of greater than 75 percent grant components without required waivers, or substituting equity for the loan portion without adequately informing all prospective applicants. We found

that RUS approved 24 sampled Round Two infrastructure awards (\$149,499,810) that had a greater than 75 percent grant component without waivers. Finally, we found RUS did not advance funds proportionally for 2 of the 86 BIP awards reviewed. These issues generally occurred because RUS did not develop procedures and guidance outlining how various processes were to be carried out.

Generally, we recommended that RUS capture and report actual performance data to measure the impact of each award, formally notify BIP awardees of the possibility to substitute equity for the loan component, and ensure grant/loan combination funds are advanced proportionally. We also recommended that RUS develop and update guidance on how to accomplish each of these tasks. RUS agreed to strengthen BIP by establishing additional written guidance to address specific processes.

Rural Development

Financial Statements for Fiscal Years 2013 and 2012
Report 85401-0003-11
Issued December 10, 2013

OIG performed the annual audit of RD's consolidated financial statements for fiscal years 2013 and 2012. RD received an unmodified opinion from OIG's audit of RD's consolidated financial statements. We determined that the agency's financial statements for the 2013 and 2012 fiscal years present RD's financial position as of September 30, 2013 and 2012, fairly in all material respects, and were prepared in accordance with accounting principles generally accepted in the United States of America. This includes the agency's net costs, changes in net position, and statements of budgetary resources.

Our consideration of RD's internal control over financial reporting identified no material weaknesses. However, our consideration of compliance with laws and regulations noted an instance of noncompliance with the Improper Payments Elimination and Recovery Act of 2010. This report did not provide recommendations.

Departmental Management

OCFO/National Finance Center

Improper Payments Elimination and Recovery Act of 2010 Compliance Review for
Fiscal Year 2012
Report 50024-0004-11
Issued March 14, 2013

OIG audited USDA to determine whether the Department complied with the Improper Payments Elimination and Recovery Act of 2010 (IPERA) to effectively reduce its improper payments. OIG determined that USDA did not comply with IPERA for a second consecutive year. Although USDA made progress to improve its processes to substantially comply with IPERA, the Department was not compliant with three of the seven IPERA requirements. Specifically, USDA and its component agencies did not always report sufficient estimates for high-risk programs, report error rates below specific thresholds, and meet annual reduction targets. This occurred because USDA has not completed actions to assess results and achieve compliance. These noncompliances continue to illustrate the risks of improper payments affecting taxpayers, as USDA could

have avoided approximately \$74 million in improper payments by meeting reduction targets. As required, OIG must report to Congress that USDA did not comply with IPERA. For those programs that did not comply with IPERA for two consecutive fiscal years, USDA must consult with OMB to discuss further actions. In addition, USDA needs to implement further actions to improve its risk assessments and reporting accuracy. With improvements not yet fully implemented, the Department faces an increased risk that it may not identify programs that need to annually report and reduce improper payments. Also, some of USDA's reported actions to prevent and reduce improper payments do not reflect its actual progress. We briefed USDA officials on our results, and they generally concurred with our findings and recommendations. USDA should implement controls to ensure its actions to report and reduce improper payments meet IPERA requirements, and accurately and completely reflect USDA's progress.

Review of the Department's Travel Card Data
Report 50024-0003-13
Issued June 10, 2013

OIG analyzed transaction data for USDA's employee travel cards in order to identify any inappropriate transactions and to determine if USDA is adequately monitoring employee travel card actions.

OIG identified a low incidence of cardholder misuse, and determined that USDA's OCFO and five of six agencies reviewed were following guidelines. However, we identified that 14 of 80 statistically sampled fiscal year 2011 travel card charges were inappropriate because employees used the cards when they were not authorized for official travel. Although other USDA agencies identified such transactions and followed up appropriately, we found that the FS did not identify nine of the inappropriate charges, because FS was not performing adequate reviews of employee transactions. As a result, we took an additional statistical sample of FS transactions. We found 4.1 percent of the sampled FS transactions (all attributable to four employees) occurred during a time when the employees were not authorized for travel. Further review of the four relevant employees' travel card accounts disclosed that they had used their travel cards approximately 500 times without a travel authorization. FS did not detect this because the checks FS performs are limited and did not identify the instances we noted, and USDA does not currently have an automated check to identify this type of misuse. Due to the misuse, four employees improperly used lines of credit on their travel cards to make personal charges, totaling approximately \$13,700. Further, two of these individuals' accounts were delinquent by a combined total of more than \$3,000. USDA does not allow employees to carry a delinquent balance, as all official travel expenses are reimbursed to employees.

OIG recommended that FS pursue disciplinary action against four individuals who misused their USDA travel cards and immediately implement procedures to review employees' travel card transactions to ensure they occur during approved travel dates. OCFO and FS generally agreed with our recommendations.

Executive Order 13520, Reducing Improper Payments - Fiscal
Year 2012

High-Dollar Report Review
Report 50024-0003-11
Issued August 22, 2013

OIG reviewed information from USDA FY 2012 quarterly reports on high-dollar overpayments made by programs susceptible to significant improper payments.

To intensify efforts to eliminate payment error, waste, fraud, and abuse in Federal programs, the President issued Executive Order 13520, "Reducing Improper Payments." The Executive Order requires OIG to review USDA's quarterly high-dollar overpayment reports and make recommendations, as necessary, to agencies' plans to recover and prevent high-dollar overpayments.

We found that in the third year of reporting, USDA reported more comprehensive information about high-dollar overpayments than it did in previous years. Specifically, due to improved reporting oversight and processes, USDA reported 239 overpayments, totaling approximately \$20.3 million, in FY 2012. This represents an increase of 67 percent over the number of overpayments reported the previous year. However, we determined that the quarterly reports included errors and were published up to 102 days after the due date. This occurred because, although agency chief financial officers certified that information was accurate and met applicable criteria, component agencies' submissions required substantive review by the OCFO to ensure USDA followed the high-dollar reporting guidance appropriately and that only payments that were supposed to be reported were included. Without accurate and timely reporting, the effects of USDA's actions or strategies to eliminate the errors causing high-dollar overpayments are not fully known.

USDA's OCFO agreed with our recommendation to provide additional oversight over component agencies' processes to ensure component agencies' high-dollar overpayment reports comply with Departmental high-dollar reporting guidance.

Statement on Standards for Attestation Engagements No. 16, Report on Controls
at the National Finance Center for October 1, 2012, to July 31, 2013
Report 11401-0005-11
Issued September 27, 2013

USDA's National Finance Center (NFC) provided OIG with a description of its payroll personnel and application hosting systems for the period from October 1, 2012, through July 31, 2013. NFC also provided an assertion about whether the description was fairly presented and controls were suitably designed and operating effectively to achieve control objectives specified in the description. OIG performed an examination of the description and assertion in accordance with standards issued by the Comptroller General of the United States and relevant attestation standards issued by the American Institute of Certified Public Accountants.

In our opinion, in all material respects, based on the criteria described in NFC's assertion, NFC's description fairly presents the payroll/personnel processing and application hosting systems NFC designed and implemented throughout the specified period. Also, in our opinion, the described controls were suitably designed and operating effectively to provide reasonable assurance that associated control objectives would be achieved during the period, if user entities effectively applied controls complementary to the design of NFC's controls. This report did not contain recommendations.

Agreed-Upon Procedures: Employee Benefits, Withholdings, Contributions, and
Supplemental Semiannual Headcount Reporting

Submitted to the Office of Personnel Management
Report 11401-0006-11
Issued September 27, 2013

OIG performed agreed-upon procedures for assessing information reported by USDA's NFC.

USDA's NFC reports Federal employee benefits, enrollment information, and Combined Federal Campaign (CFC) deductions to the OPM. Reported information includes retirement, health benefits, and life insurance withholdings and contributions; agency-submitted headcounts; and payroll deductions relating to CFC. In applying agreed-upon audit procedures, we identified differences through calculations, analysis, and comparisons. For instance, we identified that headcounts for military deposit and salary offsets often differed by more than 2 percent, and that reported counts relating to certain types of payers for health, life insurance, and/or retirement benefits differed as well. We also found that total headcounts were sometimes misallocated, and an inconsistency exists in counts for those enrolled with no deductions for retirement and other counts. NFC stated that scheduled programming modifications will correct the majority of the issues identified.

Additionally, we identified differences related to CFC deductions for employees at duty stations with no CFC, accounting code differences, and instances of incorrect CFC pledge form use. Generally, NFC attributed the CFC errors to manual processes and human error, including by personnel at various agencies. NFC noted the low error rate overall, and stated it was responsible for processing very few of the transactions identified as differences.

Our sample document review disclosed 8 errors for benefits entered into the system by entity staff. Furthermore, we were unable to verify entries for 151 personnel documents we tested because entities' personnel officers were unable to locate the documents. However, to ensure that information from the system was accurate, we performed any applicable calculations for salary, retirement, life, and health insurance. We noted no exceptions. We did not make any recommendations in this report.

Department of Agriculture's Consolidated Financial Statements for
Fiscal Years 2013 and 2012
Report 50401-0005-11
Issued December 13, 2013

OIG audited USDA's consolidated financial statements for fiscal years 2013 and 2012, and also assessed internal controls over financial reporting and compliance with laws and regulations.

OIG determined that USDA's consolidated financial statements fairly present, in all material respects, USDA's financial position as of September 30, 2013 and 2012. Statements of net cost, changes in net position, and budgetary resources for these years conform with accounting principles generally accepted in the United States.

OIG's review of USDA's internal controls over financial reporting identified four significant deficiencies, two of which are material weaknesses. Specifically, three of USDA's component agencies need to make further improvements to their internal controls over financial reporting. Also, USDA needs to improve its information technology security and controls, as many

long-standing weaknesses remain. Moreover, USDA needs to improve its controls over financial reporting, as our review again disclosed deficiencies related to obligations and abnormal year-end balances. The final significant deficiency we identified relates to deviations in information technology controls over two financial systems. Additionally, this report includes a finding related to USDA's lack of substantial compliance with the Federal Financial Management Improvement Act of 1996, and a finding related to a violation of the Anti-Deficiency Act.

We recommended additional actions needed to correct invalid obligation balances and mitigate deviations in information technology controls over two financial systems. The Department concurred with our findings and generally agrees with our recommendations.

Department of Agriculture's Closing Package Financial Statements for
Fiscal Years 2013 and 2012
Report 50401-0006-11
Issued December 17, 2013

The U.S. Department of Agriculture's fiscal years 2013 and 2012 special purpose financial statements received an unqualified opinion. We found no material weaknesses in internal control over the financial reporting process and our tests of compliance with Treasury regulations disclosed no instances of noncompliance that were required to be reported.

Office of the Chief Information Officer

Fiscal Year 2013 Federal Information Security Management Act
Report 50501-0004-12
Issued November 26, 2013

As required by FISMA, OIG reviewed USDA's ongoing efforts to improve its IT security program and practices, in FY 2013. OIG found that, although USDA continues to improve the security posture of its IT infrastructure and associated data, many longstanding weaknesses remain. In FY 2009 through 2012, OIG made 49 recommendations for improving the overall security of USDA's systems, but only 19 of these have been closed. We noted that OCIO is taking positive steps to improve its security posture in the future. For example, OCIO released three key Departmentwide policies in the latter part of FY 2013 and the beginning of FY 2014. However, it is now critical that agencies create and implement agency-specific procedures based on Departmental policy. OCIO then needs to review the agencies' implemented procedures to ensure compliance with USDA policy. Once this process is institutionalized throughout USDA, its security posture should improve and be sustainable into the future.

Again this year, we continue to report a material weakness in USDA's IT security. The Department has not (1) developed policies, procedures, or strategies for continuous monitoring or risk management; (2) monitored agencies for compliance with baseline configurations and ensured known vulnerabilities were fixed; (3) deleted separated employees' access to computer systems; (4) developed and implemented a policy to detect and remove unauthorized network connections; or (5) finalized and issued policy for information security oversight of systems that contractors or other entities operate on USDA's behalf, including systems and services residing in the cloud. OCIO concurred with our findings and agrees that a material weakness exists with respect to IT security within USDA.

Office of Procurement and Property Management

OIG's Review of Procurement Oversight Audit of South Building Modernization
Project
Report 50703-0001-12
Issued March 25, 2013

The Recovery Act provided USDA's Departmental Management with approximately \$17 million to modernize a wing of USDA's South Building in Washington, D.C. To ensure that the transparency and accountability requirements of the Recovery Act are met, OIG contracted with Regis & Associates, PC, to audit Departmental Management Recovery Act procurement activities. The audit was done to ensure that activities were carried out in accordance with Federal Acquisition Regulations, Office of Management and Budget guidance, and Recovery Act requirements.

The audit found Departmental Management's contracting staff were experienced and qualified to monitor the contract. However, we identified a chronic invoice payment issue and Recovery Act reporting issues. Specifically, we found that Departmental Management did not pay 16 of 17 invoices in a timely manner. Because Departmental Management did not effectively ensure that staff with sufficient warrant authority was available to approve invoices if, for instance, personnel assigned to the contract were on leave or transferred, USDA incurred late payment interest penalties of over \$18,000. We also found that information reported on Recovery.gov for the project contained inaccuracies. As a result of a previous audit, Departmental Management issued procedures for Recovery Act contracting. However, because the procedures do not clarify reporting for projects with multiple funding sources, staff reported the project's funding on Recovery.gov inaccurately. Departmental Management generally agreed with our recommendations.

Review of Procurement Operations
Report 92501-0001-12
Issued September 27, 2013

OIG audited the Office of Procurement and Property Management's (OPPM) Procurement Operations Division (POD) to evaluate the effectiveness of the controls in place to ensure the integrity of the procurement process.

POD is responsible for processing procurements for Departmental Management and Staff Offices. OIG reviewed POD's controls over the procurement process and found several issues POD needs to address. First, POD was not keeping sufficient documentation during the acquisition and invoicing processes for Departmental Management and Staff Office information technology (IT) procurements. This occurred because POD did not require a centralized method or system—such as the Integrated Acquisition System (IAS) or the Enterprise Content Management system (ECM)—to track and store all documentation. Second, Departmental Management and Staff Office personnel had issues with IAS user accounts, including undefined user roles and users with excessive access abilities. This occurred because the Procurement Systems Division (PSD), which manages IAS, has not kept the system up-to-date to safeguard against vulnerabilities, including the documentation of how IAS integrates with the Department's new accounting system. We found that a POD contracting officer signed three contract actions that exceeded the contracting officer's warrant authority. This went undetected by POD because it did not have

formalized policies and procedures to monitor contracting officers' actions, which was conveyed to management in a report issued in November 2011.

OIG recommended OPPM should require a centralized repository for procurement and invoicing documents, and update IAS guidance to address user account issues and how IAS will interface with the Department of Agriculture's new financial system. We also recommended that OPPM identify whether other contracting officers have exceeded their warrant authority and establish internal controls to ensure warrant levels are not exceeded.

OPPM generally agreed with OIG's findings and we have reached management decision on all of the report's 12 recommendations.

Homeland Security and Emergency Coordination

Classification Management

Report 61701-0001-32

Issued September 27, 2013

OIG reviewed USDA's process for classified documents in order to determine if the Personnel and Document Security Division (PDSD) is adequately managing USDA's classified national security information program, as required by the Reducing Over-Classification Act.

This is the first of two reports required by the Reducing Over-Classification Act to determine USDA's compliance with Federal regulations. The Act was designed to prevent information from being over-classified and over-compartmentalized, and to promote information sharing, as prescribed by Federal guidelines.

PDSD focuses on safeguarding national security information within USDA. We found that PDSD lacks proper guidance for eight key areas relating to classification management, and does not have a records management system that would identify documents that need to be declassified or reviewed for continued national security. We also found that USDA's classification guide was missing required elements needed for proper derivative classification decisions. PDSD also needs to improve its reviews of classified markings on documents. Additionally, PDSD does not always obtain and maintain adequate statistics related to the security classification program and USDA does not ensure that its subordinate agencies are conducting self-inspections in accordance with regulations and procedures. Finally, PDSD's classification management training content and documentation need to be improved, particularly in providing required information to individuals with security clearances. As a result, there is a greater potential for over-classifying or improperly releasing national security information.

OIG recommended that USDA ensure records management, departmental regulations, procedures, and the classification guide reflect Federal classification requirements, and review all USDA classified documents to correct improper markings. The original classification authority should direct all subordinate agencies to report self-inspections and program statistics. PDSD should develop, record, and track all training that meets Federal requirements.

OIG accepted management decision on 8 of the 17 recommendations; however, further action from the agency is needed before management decision can be reached for the other recommendations.

Civil Rights

In re Black Farmers Discrimination Litigation
 Report 50601-0001-21
 Issued December 4, 2013

OIG conducted a performance audit of the claims process for the BFDL settlement, based on a statistical sample of provisionally adjudicated claims. Before the deciding official (known as the Neutral) finalized decisions regarding BFDL claims, OIG conducted audit work to evaluate the integrity and consistency of the processes applied to claimants. Overall, nothing came to our attention to indicate that the claims process was not implemented in accordance with the BFDL settlement agreement. However, we identified three findings:

- The Neutral's adjudicators reached different conclusions for claims that essentially contained the same information. For claims that were similar, they approved some and denied others. We identified 8 such claims in our random sample of 100 claims.
- The Claims Administrator (CA) had not identified all instances where multiple claims may have been filed for a single farming operation or an individual class member. We identified 7 such claims in our random sample.
- The Neutral had provisionally approved at least 20 persons who were ineligible for a BFDL award because they had participated in the *Pigford v. Glickman* settlement.

We discussed these issues with officials from the CA and the Neutral in June 2013. After our meeting, the CA and the Neutral provided us with documentation that supported the actions they had taken, demonstrated how they addressed each of our findings, and detailed additional actions they planned to take prior to the final adjudication of claims. Their stated actions should address our audit findings. We plan to test the effectiveness of the actions in a subsequent audit.

The Neutral and the CA have taken action to address the concerns we brought to their attention during the course of our audit; therefore, we made no formal recommendations.

Investigations

Examples of OIG investigative work in all program areas can be found in our Semi-Annual Report to Congress located at www.usda.gov/oig. In addition, recent Investigations Developmental Bulletins are posted at <http://www.usda.gov/oig/newinv.htm>; these include recent sentences, press releases, and summaries of current investigative work. Included below are some examples of our investigative work:

Forest Service

From FY 2012 to February 10, 2014, OIG opened 26 investigations related to the FS. In that same time period OIG had 15 indictments and 18 convictions with \$632,054 in monetary results.

In a recent investigation, OIG was contacted by a confidential source who reported a Supervisory Forestry Technician had acted in a sexual harassing manner towards another female employee. In the midst of the harassment/assault investigation, information was developed that the employee had requested the use of Government Purchase Cards belonging to other FS employees and items purchased with these cards were subsequently sold on an eBay account. Further investigation by OIG and FS-Law Enforcement and Investigations revealed the individual stole numerous items purchased on the government purchase cards and sold these items on an eBay account traced to the individual. The loss to the Federal government was at least \$9,947. The subject resigned from FS and in January 2013, the subject was charged in U.S. District Court on one count of theft of government property. In February 2013, the defendant was arraigned, pled guilty, and sentenced to 24 months' probation, 100 hours' community service, and restitution of \$9,947.

Animal and Plant Health Inspection Service (APHIS)

From FY 2012 to February 10, 2014, OIG opened 36 investigations related to APHIS. During that same time period OIG had 169 indictments, 123 convictions, and \$959,617 in monetary results.

OIG investigated an individual who represented several lumber companies and defrauded both U.S. and foreign companies in conjunction with the purchase of lumber to be sold to overseas customers. He transmitted fraudulent phytosanitary certificates with APHIS inspectors' forged signatures to induce foreign customers to wire funds and, in some instances, sent uninspected wood products to foreign victims. He committed more than \$1 million in fraud, which included the fraudulent purchase of lumber from U.S. companies, as well as fraudulent transactions with customers in Poland, Vietnam, Egypt, and China. The investigation determined the subject was a fugitive from justice being sought in five States on a total of eight open warrants, including violation of probation, escape from work release, larceny and vehicle theft, fraud, and felony false pretense/bad checks. In January 2014, in U.S. District Court, Southern District of New York, he was sentenced to 116 months in prison, followed by 36 months of supervised release, and ordered to pay a \$500 special assessment. The judge will rule on a proposed \$1.1 restitution amount at a later date. The man and three co-conspirators, including his fiancée, were charged in November 2012 with conspiracy to commit wire fraud. He was also charged with aggravated identity theft and pled guilty in July 2013 to all three charges. The man's fiancée entered into a deferred prosecution agreement the same day he was sentenced. Prosecution of the other two subjects is pending.

Food Safety Inspection Service

From FY 2012 to February 10, 2014, OIG opened 37 cases related to the FSIS. During that same time period OIG had 44 indictments, 27 convictions, and \$174.8 million in monetary results.

In June 2011, OIG received a complaint that an individual had reproduced USDA inspection labels and affixed these labels on pork and poultry products which were sold commercially. Our investigation disclosed that between January 2010 and June 2011, the individual produced the official USDA mark of inspection label and then used these labels on meat products, which were then sold commercially. In August 2012, the subject pled guilty to one count of

falsification of the official USDA mark of inspection. In March 2013, the individual was sentenced to 2 years' probation and ordered to serve 60-80 hours of community service.

Food and Nutrition Service

SNAP

From FY 2012 to February 10, 2014, OIG opened 623 investigations related to the SNAP program. During the same time period OIG had 1,359 indictments, 853 convictions, and \$132 million in monetary results.

A Lansing, Michigan, trio devised a SNAP trafficking scheme which resulted in over \$470,000 in illicit profits over a 3-year period. During the course of our investigation, the small grocery store averaged more than \$54,000 a month in SNAP redemptions. The owner, his wife, and another store associate exchanged SNAP benefits for cash on multiple occasions from September 2010 through March 2012. All three individuals ultimately pled guilty to felony charges in U.S. District Court, Western District of Michigan. In June 2013, the leader of the conspiracy was sentenced to 54 months' incarceration, 36 months' supervised release, and \$472,485 in restitution payable to FNS. His spouse was sentenced to 36 months' probation and was ordered to pay \$472,485 in restitution jointly with her husband. In August 2013, the third individual was sentenced to 12 months and 1 day of incarceration and \$306,897 in restitution payable jointly with his co-conspirators.

WIC

From FY 2012 to February 10, 2014, OIG opened 27 WIC related cases. During the same time period OIG had 27 indictments, 32 convictions, and \$10.3 million in monetary results.

A joint investigation with the Immigration and Customs Enforcement-Homeland Security Investigations and the Georgia Department of Public Health Office of Inspector General determined the owner of a small store in Georgia defrauded WIC of approximately \$400,000 between May 2009 and December 2010. During the investigation, the store owner and his employees purchased WIC vouchers for cash on 18 separate occasions. The store owner was charged in U.S. District Court, Northern District of Georgia, with 18 counts of WIC fraud and 83 counts of possession of forged securities. In May 2013, he pled guilty to all charges. In September 2013, he was sentenced to 22 months in prison, to be followed by 36 months of probation. He was ordered to pay \$14,000 in restitution and a special assessment of \$10,100. This case also resulted in the administrative seizure of \$82,000.

Child and Adult Care Food Program (CACFP)

From FY 2012 to February 10, 2014, OIG opened eight investigations related to CACFP. During the same time period OIG had eight indictments, four convictions, and \$601,216 in monetary results.

In October 2013, in U.S. District Court, Eastern District of New York, the executive director of a child development center who misappropriated funds for feeding children was sentenced to 57 months in prison, followed by 36 months of supervised release and 300 hours of community service, and was ordered to pay \$2.2 million in restitution (jointly and severally with her husband), a fine of \$100,000, and a \$100 special assessment. In October

2013, her husband (who has been in custody for the past 13 months) was sentenced to 36 months of probation, including 12 months' home confinement with electronic monitoring, and 300 hours of community service. He was also ordered to pay \$2.2 million in joint and several restitution, a fine of \$7,500, and a \$100 special assessment. In addition, the couple was ordered to forfeit \$3 million seized during the investigation. Our investigation, initiated from an OIG audit referral, determined that the executive director submitted fraudulent eligibility paperwork to inflate the number of children eligible for free and reduced price meals through the CACFP and also inflated meal counts on CACFP claims for restitution. She also engaged in a conflict of interest by using CACFP funds to pay for supplies from a company operated by her husband and misappropriated CACFP funds to pay for personal expenses. The child development center had participated in CACFP since 2002 and collected reimbursements for meals served totaling approximately \$13.2 million. The woman and her husband were charged in September 2011 with theft or bribery concerning programs receiving Federal funds. They pled guilty in April 2012. This investigation was conducted jointly with Internal Revenue Service - Criminal Investigation, the Nassau County Police Department, and the New York State Department of Health.

Farm Service Agency

From FY 2012 to February 10, 2014, OIG opened 93 investigations related to the FSA. In that same time period, OIG had 72 indictments, 70 convictions, and \$33.7 million in monetary results.

An OIG investigation determined an Iowa producer intentionally altered a corn contract to reflect a significantly greater amount of grain in storage than actually existed, which resulted in a local bank issuing a loan guaranteed by FSA. The producer eventually defaulted on the loan, causing a significant loss to the financial institution and USDA. In July 2013, the producer, who had previously pled guilty to making a false statement for the purpose of influencing a financial institution, was sentenced to 24 months' incarceration and was ordered to pay \$200,000 in restitution to FSA and \$155,000 in restitution to the financial institution.

Risk Management Agency

From FY 2012 to February 10, 2014, OIG opened 33 investigations related to the RMA. In the same time period, OIG had 25 indictments, 21 convictions, and \$40.6 million in monetary results.

An OIG investigation in North Carolina disclosed that, between September 2005 and September 2011, a crop insurance agent assisted his clients in hiding tobacco production and filing false crop insurance claims. His actions caused \$7.4 million in fraudulent Federal crop insurance indemnity payments and \$1.0 million in fraudulent crop hail indemnity payments to be paid to his insured clients. In February 2013, in U.S. District Court, Eastern District of North Carolina, he was sentenced to 108 months' imprisonment, followed by 36 months' supervised release, and ordered to pay \$7.4 million in restitution to RMA and \$1 million in restitution to various private insurance companies.

Rural Development

From FY 2012 to February 10, 2014, OIG opened 55 cases related to RD. In the same time period, OIG had 72 indictments, 41 convictions, and \$32.2 million in monetary results.

An OIG investigation disclosed a group of individuals committed a number of illegal acts to obtain a \$27.3 million RD-guaranteed loan to purchase a rural Mississippi hospital. Other crimes were committed while they operated the hospital. The hospital loan went into default in 2007, resulting in a multi-million dollar loss to RD. As a result of our investigation, five individuals were charged in U.S. District Court, Northern District of Mississippi, with making false statements, mail fraud, theft, bribery, embezzlement, and health care fraud. A physician who pled guilty to mail fraud, theft, and bribery was sentenced in November 2012 to serve 24 months of home confinement and 36 months of probation, and was ordered to pay \$400,000 in restitution. A county administrator who pled guilty to the same charges was sentenced in February 2013 to 14 months' incarceration and ordered to pay \$33,564 in restitution and a \$40,000 fine. Two businessmen were found guilty by a Federal jury in March 2012 of multiple offenses, including embezzlement, kickbacks, and lying to investigators. One of these men has been sentenced to 55 months' incarceration and 36 months of probation, and was ordered to pay a fine of \$10,000. Sentencing is pending for the other businessman. The fifth individual charged died after he was indicted.

Additionally, the chart below describes our FY 2013 investigative results relative to each USDA agency, including the FS.

Agency	Indictments	Convictions	Monetary Results
AMS			\$9,283,698
APHIS	119	42	\$692,401
ARS	1	3	\$360,883
FAS		2	\$342,600
FNS	684	431	\$52,789,535
FS	9	9	\$549,354
FSA	29	22	\$10,459,778
FSIS	26	10	\$1,965,758
GIPSA		2	\$200
Multi	2	2	\$37,527
NASS			
NIFA			
NRCS	4		
OCFO			
OCIO			
OGC			
OIG			
RBS	8	1	\$117,593
RHS	26	16	\$4,158,385
RMA	8	9	\$36,771,754
RUS	1	2	\$5,130,855
SEC			
TOTAL	917	551	\$122,660,534

CONGRESSWOMAN ROSA L. DELAURO

USDA OIG HEARING QUESTIONS

Ms. DeLauro: Thank you for your testimony, Ms. Fong. In that testimony you mention several food safety issues that I would like to follow up.

Regarding Goal 1 - Safety and Security, the OIG report on hog slaughter found that FSIS had not evaluated the efficacy of the hog HIMP pilot, yet the agency has based equivalency determinations for Canada, New Zealand, Australia for red meat export inspection systems based on that pilot. Is the OIG going to consider an audit of those equivalency determinations to ascertain their propriety?

Response: Yes. In February 2014, we initiated a review to evaluate the changes the Food Safety and Inspection Service (FSIS) announced in January 2013 to the agency's import inspection program. FSIS officials recently informed us these changes are expected to be completed by the end of FY 2014. Accordingly, we plan to review this area in FY 2015. We plan to evaluate FSIS' process for determining equivalency of a foreign country's inspection system and oversight to determine whether foreign inspection systems remain equivalent. We will also follow up on prior audit recommendations concerning the inspection of imported meat and poultry products.

Ms. DeLauro: In an April 2012 report you identified multiple shortcomings related to the inspection of meat and poultry processing facilities. You noted that you were unable to determine the sufficiency of the FSIS staffing level because of inadequate data was of particular concern. The July 2013 OIG report on excessive overtime at FSIS found that 400 FSIS inspectors were working long hours that could compromise their ability to do their jobs effectively. What has FSIS done to remedy the situation? Has there been an effort to collect data that will help resolve this problem? Is FSIS now billing industry properly for overtime worked by FSIS inspectors?

Response: In our audit report, *Assessment of FSIS Inspection Personnel Shortages in Processing Establishments* (Audit Report 24601-0011-Hy, issued April 2012), we made a recommendation that FSIS create additional categories in the Public Health Information System (PHIS) to track the reasons for missed procedures at processing establishments. We also recommended that FSIS periodically analyze data of the establishments not inspected to determine the causes for missed inspections and take action, as needed. To address this, in January 2012, FSIS implemented an expanded list of 24 available choices in the PHIS system for inspection personnel to use when they cannot perform all scheduled inspection tasks.

FSIS also directed its Data Analysis and Integration Group (DAIG), on a bi-annual basis, to review PHIS data on inspection tasks being designated as "Not Performed," including the frequency of the type of tasks not performed and the reasons cited by Inspection Program Personnel (IPP), to determine whether potential trends exist and to inform decisions about allocation and prioritization of inspection work. FSIS plans to use these analyses to adjust inspection assignments, when warranted, to help ensure adequate inspection coverage. We have reached management decision on these recommendations. FSIS has reported to OCFD that FSIS has completed the corrective actions associated with these recommendations.

In our recent audit of *FSIS' and AMS' Field-Level Workforce Challenges* (Audit Report 50601-0002-31, issued July 2013), OIG found that FSIS inspectors often worked far more hours than their AMS colleagues, a situation that could impair food safety. In addition, we found that FSIS could improve how they monitor or bill industry for their services. We made several recommendations to address these conditions.

To address the hours worked by FSIS inspectors, we recommended that FSIS conduct an internal review of the safeguards FSIS currently has in place that limit the number of overtime hours an inspector is required to work and determine their effectiveness. Also, FSIS should perform an analysis to determine how many hours field staff can reasonably be expected to work for an extended period of time, while still maintaining appropriate mental and physical acuity. FSIS should also take appropriate action, as needed, on this review and analysis. To address this, FSIS agreed to conduct an internal review to examine the management controls in place to address excessive overtime hours or to approve exceptions to the limits in the Labor Management Agreement. The outcome of this review of the control process will determine if an internal audit should be conducted, to include effects of extended hours of work when reviewing employee fitness for duty. FSIS also has generated overtime reports that are sent to managers for their oversight and regular review. In addition, procedures will be developed for these managers to provide the appropriate action. We have reached management decision for this recommendation and FSIS has reported its completion of the corrective actions to OCFD.

We also made several recommendations to improve the billing of industry of overtime worked by FSIS inspectors. These recommendations address automating or facilitating reconciliations of FSIS' time and attendance reporting system to its system for billing overtime, and developing a plan to implement a timekeeping system that will allow inspectors to track their time electronically for general timekeeping and billing purposes. We reached management decision on the recommendations regarding billing for overtime. FSIS estimates that final action will be reached on these recommendations by December 31, 2014.

Ms. DeLauro: Lastly, the OIG semi-annual report to Congress (April 1 - September 30, 2013) refers to the review of the Public Health Information System (PHIS) for domestic inspection (FSIS). Now that FSIS is relying more on PHIS, what is the status of the PHIS audit?

Response: In this audit, we are evaluating the progress of FSIS' implementation of the domestic inspection portion of PHIS. We currently estimate releasing the final report associated with this audit in the summer of 2014.

Ms. DeLauro: Regarding Goal 2 - Integrity of Benefits, I think that it is important for us to understand the issue of SNAP errors and fraud relative to other programs under USDA's jurisdiction. Can you explain what issues of fraud there are in other USDA programs such as crop insurance or subsidy payments? What are examples of the kinds of problems that you see there? It would seem that there may not be enough resources allocated by the Department to do adequate oversight of these programs given the prevented planting payments discussion in your written testimony.

Response: When conducting audits of USDA agencies and its programs, if fraudulent issues are identified (such as review of vendor records or entities included in our audit scope), they are referred to our office of Investigations.

Since FY 2010, we have been spending approximately 14 to 20 percent of our investigative time and resources investigating fraud and mismanagement involving FSA and RMA programs. Most of our investigations find fraud on the part of program applicants and participants, including false claims on FSA loan applications, conversion of collateral that secures FSA direct and guaranteed loans, the establishment of sham farming operations on paper in order to receive more benefits than allowed under payment limitation rules, the hiding of crop production in order to file false crop insurance claims, and other kinds of illegal activity involving improper crop insurance and farm subsidy benefits. The chart below provides further information on investigative resources spent on FSA and RMA programs by Fiscal Year.

Percentage of Time Dedicated to FSA and RMA Investigations FY 2010 through 2014

	% FSA	% RMA	Total % Combined FSA/RMA
FY 2010	13.86%	6.10%	19.96%
FY 2011	9.87	5.23	15.10
FY 2012	9.96	4.55	14.51
FY 2013	9.85	5.24	15.09
FY 2014 (to date)	9.08%	5.14%	14.22%

THURSDAY, MARCH 6, 2014.

COMMODITY FUTURES TRADING COMMISSION

WITNESS

HON. MARK WETJEN, ACTING CHAIRMAN, COMMODITY FUTURES TRADING COMMISSION

Mr. ADERHOLT. Okay. The subcommittee will come to order.

Chairman Wetjen, I welcome you today to the subcommittee. We apologize for a late start, but votes were called, and of course, we are not in control of the vote schedule. So thank you for bearing with us on that.

Congratulations on your new job and new role as Acting Chair. I appreciate your taking the opportunity to testify. As the Acting Chairman and accommodating our short schedule this year to have this hearing in order to accommodate our regular order, we look forward to your testimony this morning and hearing from you.

As we all know, the Commodity Futures Trading Commission is responsible for principle-based regulations of commodities, futures, options and swap markets in the marketplace. These markets are integral to our Nation's free enterprise system.

Some would say that the CFTC is resource starved. I think we need to take a closer look at that perception. This agency has received seven consecutive annual increases in funding, an overall increase of 92 percent since the financial crisis of 2008.

There are not many agencies that have enjoyed such an increase. For this reason, I am glad to see the decreased budget request of \$280 million and the President's acknowledgement that this committee has been saying for a while now that the requests for the past few years were inflated and not based on real needs.

One of those issues I want to be sure to address today is the absolutely unnecessary furloughs that occurred in 2013. I understand that this did not happen under your watch as the chairman, but I do want to be sure that the employees of the CFTC understand that they were victims of what some of us think were some questionable decision making.

We sent out a statement on October 24th, 2013, and it was reported to the press that the CFTC had explicit legal authority to spend amounts necessary to avoid furloughs. At that time, CFTC told me that they could not use the authority.

However, a short while later, in January, two days after the day of agency-wide unpaid leave, CFTC used this same authority to prevent more furloughs. CFTC's choice to not prevent all agency furloughs rests squarely on its shoulder.

With regard to CFTC's fiscal year 2015 budget request, I look forward to ensuring that CFTC puts priority on resources by performing core functions properly and avoiding regulatory overreach.

CFTC has finished the majority of the rulemaking under the Dodd-Frank bill without the bloated budget request over the past few years.

Similarly, they should be able to implement the regulations without excessive funding increases. As I say, we look forward to working with the CFTC to find ways to streamline operations, put a priority on the resources that are there, and avoid unnecessary regulatory overreach.

Before we recognize you, Mr. Chairman, for your opening statement, I would like to recognize the Ranking Member of the subcommittee, the distinguished gentleman from California, Mr. Farr.

Mr. FARR. Well, thank you, Mr. Chairman.

And I would like to echo your words. Congratulations and thank you for being here today.

I was impressed with your testimony. What happens in this committee is it is sort of a push-pull here. Some people think that we are going to solve our problems by cutting everything, and others feel that we are going to solve our problems by adding everything.

I was just interested in where the two areas, and you do not have to answer this right now because this is opening statement, but I want to address a sentence in your statement, that for the responsibility that we have given you in law that Congress has enacted, Dodd-Frank, how many cops do you need on the beat.

At the same time, this issue on technology, I mean, your increase is 70 percent increase in technology, and the play between using technology so that you can have less employees, I mean, is just a smart, modern operation. But it seems to me that you cannot use technology for cops on the beat. I mean, we have not replaced in all the technology we use in law enforcement; we have not replaced literally the cop on the street.

Perhaps you can share with us how that interplays and why you need to sustain the budget that the President has asked for.

Mr. ADERHOLT. Thank you, Mr. Farr.

With that, I will turn it over to you, Chairman Wetjen.

Without objection, your full testimony will be included in the record. If you would like to summarize your testimony and hit the highlights and then we can proceed with the questions.

Again, we know we started late. So we will try to make up some time in trying to condense some things. So, again, welcome. We look forward to your testimony.

Mr. WETJEN. Thank you very much, Mr. Chairman.

Good morning, Chairman Aderholt, Ranking Member Farr, and members of the subcommittee. Thank you for inviting me to the hearing today on the President's fiscal year 2015 budget request for the Commission.

In both my written and delivered remarks, I attempt to provide this subcommittee useful context to the important role the Commission plays in the financial system and the economy as a whole, as well as the important role this committee plays in helping our agency achieve its mission.

I also hope to provide a clear picture of the potential risks posed by the continued state of underfunding for the agency.

As you know, the Commission was directed by Congress to police the derivatives markets, which includes futures, options, and

swaps contracts relating to underlying commodities. These markets are critical to the efficient functioning of the global financial system and the economies it supports. Without them, a farmer cannot lock in a price for his crop. A small business cannot lock in an interest rate that would otherwise fluctuate, perhaps raising its costs. A global manufacturer cannot lock in a currency value, making it harder to plan and grow its global business. And a lender cannot manage its assets and balance sheet to ensure it can continue lending, fueling the economy and the process.

The derivatives markets better enable these enterprises to do what they do best, create jobs and grow the economy. When not overseen properly, irregularities or failures of firms in these markets can severely and negatively impact the economy and cause dramatic losses for individual participants, and this is why appropriately funding the CFTC is so critical.

The unfortunate reality is that at current funding levels the Commission is unable to adequately fulfill the mission Congress gave it. That mission is to prevent disruptions to market integrity and the build-up of systemic risk, as well as ensure that these markets are free of fraud and manipulation.

Recent increases in the agency's funding have been essential and appreciated. They have not, however, kept pace with the growth of the commission's responsibilities, including under Dodd-Frank. Allow me to explain how the markets we oversee and the responsibilities of the Commission have grown.

The notional value of derivatives centrally cleared by clearinghouses was \$124 trillion in 2010 and is now \$223 trillion. That is nearly a 100 percent increase. Now more than ever a clearinghouse's failure to follow international guidelines in the commission's regulations designed to ensure proper risk management could have significant economic consequences.

The amount of customer funds managed by clearinghouses and futures commission merchants was \$177 billion in 2010, and is now over \$225 billion. The Commission's rules are designed to ensure customer funds are safely kept by these firms, and a failure to provide appropriate oversight increases the chance of risky practices, placing customer funds at risk.

I must remind the committee that two such firms have failed in the last few years.

The total number of registrants and registered entities overseen directly by the Commission, depending on the measure, has increased by at least 40 percent in the last four years. This includes 99 swap dealers, two major swap participants, and dozens of clearinghouses and trading venues.

The CFTC also oversees more than 4,000 advisors and operators of managed funds, some of which have significant outward exposures across the financial markets.

Additionally, the Commission directly or indirectly supervises approximately another 64,000 registrants. These intermediaries are by and large well run firms that perform important services for their customers. But those relying upon these firms in the American public deserve assurances that the risks the firms pose are being mitigated by an agency capable of meaningful oversight. Yet

the agency's current onboard staff responsible for this mission is just 644 employees.

The fiscal year 2015 request is a significant step towards the longer term funding level that is necessary to fully and responsibly fulfill the agency's core mission. It recognizes the immediate need for an appropriation of \$280 million and approximately 920 staff-years, which is heavily weighted towards examinations, surveillance, and technology functions.

The request balances the need for more technological tools to monitor the markets and identify risk and compliance issues with the need for expert staff to analyze the data collected through technology.

In conclusion, the Commission's ability to appropriately oversee the derivatives marketplace hinges on security additional resources.

Thank you for inviting me today, and I would be happy to answer any questions.

Mr. ADERHOLT. Thank you, Mr. Chairman.

As I mentioned in my opening statement, I would like to correct the misperception that CFTC has been purposely starved for resources since the financial crisis of 2008. CFTC has received a 91 percent increase in funding, practically doubling its size from 112 million to 215 million. Yet we constantly read in the press that the agency is just barely getting by, and you yourself have referred to the agency as resource constrained at different hearings.

Given the substantial increase in funding and the work that CFTC has already accomplished, why CFTC needs another 30 percent increase in funding is what we would, you know, like to hear your argument on that.

Mr. WETJEN. I appreciate the question, Mr. Chairman.

I tried to in my previous remarks just now give a number of different measurements of both the marketplace and the entities that function in the marketplace that we oversee, and I tried to give a sense of scale and also a sense of the increase in responsibilities.

And on the scale side, those two measurements of the notional value of the market plus the amount of customer funds that are supposed to be safely kept under our regulations by both clearing-houses and FCMs is a good measure.

And then I think the total number of registered entities that we either directly or indirectly oversee is a rather large number. As I said, it is roughly a total of 68,000 registered entities, and that reflects an increase in one of the subcategories of about 40 percent over the last several years.

So all that said, those descriptions try to give you a sense that the responsibilities have, in fact, grown. Some of that is a function of new responsibilities given in recent years, but the rest of it has to do with just regular organic growth in the marketplace and organic growth among the registered entities who are trying to serve needs for participants in these markets.

Mr. ADERHOLT. Of course, the President did decrease the budget request this year, and what is your rationale of his decrease?

Mr. WETJEN. Well, the budget request this year and in previous years when I have been involved in the process, I have always looked at each of them with the three primary focuses in mind, if

you will, and I have always looked at these requests to determine are we doing enough on the three core functions of surveillance, examinations, and enforcement.

And prior to my current role, I would review them with those goals in mind, to look and see are we leveraging technology sufficiently and are we including or adding enough staff to make sure we can satisfy those three key areas.

I believe previous budget requests did that. I think today's budget request before you that we are here to discuss will put us in a very, very strong footing if funded at that level. I think we are going to be able to do a level job on those three key areas.

The other thing I would point out is that the request this year is a little bit different because it tries to be respectful of the Congress' direction through the budget resolution, which basically called for level funding for discretionary spending as it relates to the current level of spending on the discretionary side. So in light of that it just felt sensible and the right thing to do to be a little bit more constrained or restrained in the request.

Mr. ADERHOLT. Well, I understand that this is the first time that you have been the chairman as far as with the budget, and so you have not had as much involvement as you have now as chairman with the resources, but thank you for the response.

Mr. Farr.

Mr. FARR. Thank you, Mr. Chairman.

You indicated in your questioning there or noted the percentage of increase in the budget, but I think it also fails to note the percentage of increase in responsibility. Can you put that into some kind of percentage terms?

And I also read that you only have 40 more employees than you did 20 years ago. So lay out for me a little bit about what the magnitude of the Dodd-Frank responsibility is, and that is what this whole debate is about. We have enacted a law. It gives you lots of things to do in these categories in an area that had never been regulated before. So you are going in to do something that nobody really had a lot of experience with, rule writing, all of that stuff, with a budget that we keep whacking away at.

It does not seem to me that you can do what you are mandated to do in law even with the "ask" the President is making. So could you put that into some context of what the increase in responsibility is?

Mr. WETJEN. I appreciate the question, Congressman.

Again, I mentioned several before, but we might just key in on those entities that we directly oversee at the CFTC. Those would be these intermediaries, such as futures commission merchants, managed funds, swap dealers, and major swap participants. In those four key categories alone we have seen an increase of 40 percent in the number of entities now registered with us.

And of course, once an entity registers, it is subject to a host of responsibilities under our regulations that we at the agency must oversee and enforce. So I think that is a pretty instructive measurement.

The other, as I said a little bit earlier, the amount of customer funds now being held by clearinghouses and futures commission merchants has increased by more than \$50 billion, I think the fig-

ure was. That is additional money that belongs to customers that has to be managed well and safely kept, and in the event that some sort of failure, which is something we have seen unfortunately in the last few years, those funds can be lost or tied up in a bankruptcy proceeding or whatever else for some amount of time, and we need to do our level best to make sure that does not happen again.

Mr. FARR. How short of what the President has asked for do you think the “ask” is? I mean, you seem from what I have read, and part of it came out of this New Republic article which was November of last year that really defends, I think, very strongly that Congress has been underfunding its responsibility for your duties.

Mr. WETJEN. So, Congressman, the question is how much—

Mr. FARR. Well, I hear you have fewer people now for enforcement than you did in 2002. How can that be? Is that just because we have not put enough money into enforcement?

Mr. WETJEN. Well, that is probably part of it. Some of it obviously has to do with attrition, but again, with more responsibilities at the agency, the growth within the Division of Enforcement has not been as fast as perhaps other divisions within the agency had to be in light of some of these new responsibilities. So that explains some of it, too.

But, no, the request, again, before you today I think will get us to the minimum level of staff that I believe we need to, again, execute on those three core areas: examination, surveillance of the marketplace, and a good, strong credible enforcement program.

Mr. FARR. My time has expired. Thank you.

Mr. ADERHOLT. Mr. Nunnelee.

Mr. NUNNELEE. Thank you, Mr. Chairman.

Mr. Chairman, thanks for being here.

Justice Oliver Wendell Holmes one day said, “I am not near as concerned where men stand as in what direction he is headed.” (sic) And I like the direction you are headed. I like it when folks come here and say, “We are going to request less money than before.” I appreciate that attitude.

But I have been around government long enough to know that when an agency comes and says, “We are going to make do on significantly less money,” I need to ask a couple questions.

So my main question is you are not looking to supplant the decrease in funding that you are requesting by any type of increase or any new user fees, are you?

Mr. WETJEN. Mr. Congressman, I appreciate the question.

The President’s proposal or request references user fees, and if that is something that Congress entertains, there would be a lot of issues to work through, and you know, the CFTC would want to be part of that process.

My view on the matter at the moment is that, again, even in the relatively short while that I have been serving as acting chair, I have seen firsthand the types of effects it has on the agency and our ability to respond to questions, to respond to petitions from the marketplace, to try and respond to international regulators who are asking for us to enhance and improve upon or increase our coordination efforts and harmonization efforts.

All those things take time and resources and people, and so the fact that we are falling a little bit short in our ability to do those types of things, it leaves me in the position where I am basically open to considering anything to make sure that we, again, have the people we need to do the job and the technology necessary to leverage that human capital.

Mr. NUNNELEE. We need to talk long and hard before we start talking about adding new user fees or increasing anything charged.

All right. Let us move on. I understand you are involved in looking at the regulations dealing with high frequency trading. Just explain to me from a layman's point of view what you are hoping to accomplish and how you want to accomplish that.

Mr. WETJEN. Well, Congressman, the main thing the agency has done is we put out for comment a concept release that asked a series of questions to the marketplace concerning how do we make sure these types of firms do not pose unacceptable risks to the marketplaces that they are operating in, and the use of algorithms and computer technology to increase the speed with which trading occurs.

It creates a certain type of risk that has to be accounted for, and the exchanges and the participants themselves have a number of risk controls in place already, and so the basic thrust of the concept release was asking questions to the marketplace: are the controls in place now the sorts of controls that are bare minimum necessities to control for that risk?

And then it also asks questions about what other types of controls might we consider, and so the focus is really on risk, and it is the type of risk that is posed by the fact that the trading activity happens so fast through the use of computers, and again, it creates unique sorts of risks and issues for policy that the commission needs to work through.

Mr. NUNNELEE. In light of the fact that you have not fully implemented all of your rulemaking required under the Dodd-Frank Act, why would you think it is necessary to move forward in new areas of regulation?

Mr. WETJEN. Well, I think, again, as it relates to high frequency trading, where we are in the process is we have put out for comment this concept release, and recently the comment period was extended. I think it might be closed now.

So what we will do now is we will read through what was submitted to us. I am sure there will be a number of discussions that take place, and depending again on what the input from the marketplace is or was through that process, we will have to make a judgment about what to do going forward, but I have not prejudged the concept release or the comment letters that have been filed under it. So that is where we are in the process at the moment.

Mr. NUNNELEE. All right. Thank you, Mr. Chair.

Mr. ADERHOLT. Mr. Bishop.

Mr. BISHOP. Thank you very much, Mr. Chairman.

And welcome, Mr. Wetjen. As you know, there have been several entities who have been working for some time with the CFTC on enforcement with respect to the metals market for aluminum at the London Metals Exchange. Your predecessor, Chairman Gensler,

last summer indicated the CFTC has the authority to act in training manipulation related to the London Metals Exchange.

Given the CFTC's role in protecting and preserving the integrity of commodity markets, are there funding or research issues that are preventing the commission from exerting its proper authority or to bring the London Metals Exchange practices in accord with global commodity exchanges where commodities are traded?

Mr. WETJEN. Mr. Congressman, I thank you for the question.

Whenever the agency and the staff at the CFTC hear anything from the marketplace about possible manipulative activity, we take all of it very, very seriously, and we look into it.

If we are resource constrained, obviously that could have some level of impact on our ability to pursue certain sorts of conduct or activity that is revealed through some kind of an investigation that we might do at the agency.

Mr. BISHOP. Is that the case in all cases?

Mr. WETJEN. Well, I cannot speak to any ongoing investigations specifically, but it does stand to reason, you know, the fewer resources we have, the harder it will be to pursue that in the best way possible.

Mr. BISHOP. You ultimately would need additional resources in order to address those concerns?

Mr. WETJEN. It would definitely be helpful, yes.

Mr. BISHOP. Thank you for that forthright answer.

As you may know, last year I shared my concern with Chairman Gensler regarding the potential international reach of the CFTC's proposed cross-border rules, particularly as they might impact Europe and Asia. Specifically there was a concern in the industry with respect to the scope of cross-border applicability, as well as the fact that both the SEC and the CFTC share some responsibility for regulating swaps.

Can you give the subcommittee an update on this matter? And I am particularly interested in where you and the SEC are in terms of the rulemaking process and whether or not there is a possibility of enacting rules that would be similar, if not the same, so that the regulated parties will not have to comply with multiple rules.

Also, can you update us on any discussion with your counterparts in Asia and Europe regarding this issue and any outcomes?

It is our understanding that the European Union is not expected to take up any rulemakings until 2016. Just tell me whether or not that is going to create some heartburn for the U.S. because of the delay.

Mr. WETJEN. Thank you, Mr. Congressman.

I guess there are two points. The first is our coordination with the SEC, and then our coordination with Europe. On the former, as you likely know, the CFTC finalized its cross-border guidance last summer, and that was the result of a fairly lengthy process that included a proposal where we solicited comments from the marketplace. The final guidance was issued last summer, there was a deliberative process that led to it, and I think that we did a level job of taking into account the feedback we got through the comment process.

So, again, that has been in place now for more than six months. Meanwhile the SEC continues its effort to implement a cross-border policy, and I can assure you there is a lot of discussion taking place between the two agencies. In fact, in just the last few weeks as sponsor of the Global Markets Advisory Committee at the CFTC, I hosted a meeting on the CFTC's cross-border policy, and we had staff from the SEC who were present at the meeting and presented and gave us their views on a host of different topics. So that is just one example of how the agencies continue to work fairly closely.

Some of this happens outside the public eye, of course, and a lot of it happens through the staff, but there is a lot of dialogue I can assure you, especially now, as I said, given the fact that the SEC still has to do a few things by way of rulemakings to put their policy in place.

Mr. BISHOP. I think my time has just about expired. Thank you.

Mr. ADERHOLT. Mr. Valadao.

Mr. VALADAO. Thank you, Mr. Chair.

And, Chairman, Andrei Kirilenko, former CFTC Chief Economist, recipient of the CFTC Chairman's Award for Excellence in 2010, and co-authored the 2010 Flash Crash Report, has recently produced a new paper on financial regulation in his role at the Massachusetts Institute of Technology.

Some recommendations he had for the financial regulators are: financial regulations should recognize the automation increasingly higher transaction speeds make it nearly impossible for humans to provide effective layers of risk management. Regulators need to change their surveillance and enforcement practices to be more cyber centric rather than human centric.

My question is your budget requests only a small increase for the development, modernization and enhancement of technology. However, it requests an increase of 35 percent for new staff. Can you explain the discrepancy, given these recommendations?

Mr. WETJEN. Thank you, Mr. Congressman.

I go back to the three key areas of our mission that I mentioned before, and they are, again, surveillance, examinations of our registered entities, and enforcement. And in order to do a sufficient job in those three key areas, we need the additional staff request under this budget.

That is not to say we do not need additional investment in technology, and I completely agree that we do. I have not read Mr. Kirilenko's paper, but I do agree with his thesis, and we have been trying to use and deploy some of the new funds set aside for technology for new initiatives. One of those new initiatives that is being considered is trying to collect and analyze order message data. That is something that some of the other commissioners at the agency have shown some interest in as well, and that is the sort of thing that I think would speak to or respond to some of the issues it sounds like raised in Mr. Kirilenko's paper.

Mr. VALADAO. Thank you.

Mr. ADERHOLT. Ms. DeLauro.

Ms. DELAURO. Good morning.

Mr. ADERHOLT. Good morning.

Ms. DELAURO. Thank you. I am sorry I was not here for your testimony, but I am delighted to have you as a witness this morning.

I want to first say very quickly that I was stunned, but pleasantly stunned, to read your forthrightness, your honesty, and the clarity of both yourself and Commissioner Chilton about underfunding and what that means to your agency.

A couple of very quick yes or no, and then I want to move on to the question. Are you a regulatory agency?

Mr. WETJEN. Yes.

Ms. DELAURO. Okay. And with that, simply what do you regulate?

Mr. WETJEN. The derivatives markets.

Ms. DELAURO. How much money is involved in that derivatives market?

Mr. WETJEN. Well, the size, the notional value of the markets fluctuate, but it is anywhere between four and \$500 trillion.

Ms. DELAURO. Four to \$500 trillion. A trillion dollars a day my colleague Mr. Farr talks. More than that.

Now, I am going to get to dollars that you need and the risk to underfunding that may not come up in this round, but I will get back to that, but your testimony, CFTC has fallen far, far short "of performance goals for its examinations activities due to a significant lack of resources."

Now, this is a subcommittee that has recently been obsessed with reducing fraud and error rates in the SNAP Program, which has one of the lowest error rates of any Federal program at 3.4 percent. I would hope that my colleagues would be equally concerned with fraud and abuses that go unchecked in the swaps, futures, and commodity markets.

I might add that as I understand it, you had 82 enforcement actions over the last three years. You brought in more than \$1.7 billion in sanctions. This would seem an area where additional funding would yield additional revenue for the government. And we have provided an appropriations amount at that time of about \$600 million.

When you have been forced to prioritize your investigations, what has been left out? What would you be able to accomplish with a more robust funding level?

Mr. WETJEN. Congresswoman, I appreciate the question and your interest in the agency.

Just speaking to, again, one of those three core areas that I had mentioned, enforcement, as you alluded to in your question, we have not really grown that division much over the last number of years, and we are actually at a lower level than we were more than a few years ago. And so with fewer staff in enforcement, obviously, it stands to reason there are probably going to be fewer enforcement matters the division can bring.

So we want to have a credible enforcement program, and so we want to be able to pursue any relevant type of conduct or manipulative conduct that an investigation turns up. And, again, in order to do that, in order to respond to every referral that comes in in a meaningful way, in order to respond to referrals from our Division of Market Oversight, which is the division responsible for surveillance, we have to have—

Ms. DELAURO. Would you be able to bring in more revenues?

Mr. WETJEN. It is hard to predict that because it sort of depends on the nature of the case, but it would stand to reason that the more matters you bring presumably the more revenues you would bring in by way of fines, yes.

Ms. DELAURO. To be repetitive, it has been three years, \$1.7 billion. What a heck of a return on an investment there.

I also might add that my understanding is that in 2002 you had enforcement people. The numbers were 154. In 2014, we had 149, and just very quickly, once again, the difference between what you were doing in 2002 and what you are doing in 2014, and the dollar amount that you are dealing with now as opposed to 2002.

Mr. WETJEN. Yes, Congresswoman, that is right. Again, I mentioned the 40 percent increase in the number of registered entities directly overseen by the agency. I think that is a very good measure of the growth of responsibilities.

I also go back to the increase in the amount of customer funds that clearinghouses and futures commission merchants have to keep safe and manage for risk. Both numbers have increased substantially and so all the more reason why we need to keep a close eye on what is happening in these markets.

Ms. DELAURO. I would just conclude by saying that my own view, and I think it is evident here, is that strong funding for the CFTC reduces the deficit in many more ways than a lot of other actions that we are presuming to take on, and so that we ought to be able to provide the resources necessary for this regulatory agency to carry out its mission.

Thank you, Mr. Chairman.

Mr. ADERHOLT. Mr. Yoder.

Mr. YODER. Thank you, Mr. Chairman.

Mr. Chairman, thank you for joining us today. I appreciate your testimony, and I want to compliment you on your open approach towards making sure that we have good information, good comment opportunities for folks to weigh in on some of the important decisions you are making at the CFTC.

I want to echo some of the concerns that Mr. Bishop brought up regarding cross-border swaps. In fact, our committee last year passed a bipartisan amendment to support the notion that the SEC and the CFTC should coordinate on these swaps so that we have as much certainty and consistency, predictability, and openness in the process to ensure that the rulemaking is done in a way that achieves the goal, which is to protect consumers and ensure that the CFTC can do its proper oversight.

I just want to note that I think the changes you brought forward as acting chair have been very positive and improved in that regard, and it has been noticed.

I want to ask a little bit of a follow-up from Mr. Bishop's question, and the guidance that you put out, I guess, in November, I know you have put that on hold and are seeking further comment because of the disarray it has caused in the market.

Can you give us a status report on the comments that you are seeking with respect to the November changes?

Mr. WETJEN. Thank you, Mr. Congressman, and I appreciate your kind words.

The advisory you mentioned from November 14th of last year was, indeed, put out for comment by the commission at the beginning of the year, and I think there is a little bit of time left in the comment period.

Once the comment period closes, we need to carefully review what has been submitted and get a better sense of how exactly the marketplace thinks that we should resolve the set of circumstances addressed in the advisory, and there are a number of different ways we could do that, including sticking with the advisory, but depending, again, on what the comments that come in say, we could consider a number of different things.

So I can assure you there is openness to considering any number of different ways to handle this, but I think that with respect to the guidance from the summer, the cross-border guidance from the summer, I think that people can perhaps quibble around the edges, but I think it reflects pretty sound policy and was the result of a very long, lengthy deliberation process. So I am very interested in making sure that that stays in place and people can continue working and complying with it.

Mr. YODER. What is the time line on the completion of the November guidance?

Mr. WETJEN. The no action relief currently in place lasts until September. So the comment period, as I said, I believe closes in another week or so. So, again, presumably we would want to, after reviewing the comment letters, make some sort of a decision about what to do before the related no action relief expires in September.

Mr. YODER. Fair enough. We have seen a lot of news about banks' involvement in the commodities markets. I know the Federal Reserve is seeking public comment on this topic. However, the CFTC has the authority to police those markets for manipulation. Do you believe the CFTC has enough statutory authority to gather the necessary information to protect the commodities markets from fraud and manipulation?

Mr. WETJEN. Yes, I believe so. There are, of course, reporting obligations over the marketplace related to derivatives. The agency also has special call authority that it can rely upon if it hears of something and it gets a referral and wants to follow up with additional information. So that is something that we have at our disposal.

We, of course, can share information with other Federal agencies, and an example of this that does not necessarily relate to all of the energy markets, but at least with respect to power and electricity, we just announced the first transfer of data from the CFTC to the FERC yesterday, and that was done pursuant to a memorandum of understanding that the two agencies entered into, which we were directed to do by the Congress several years ago.

So I feel reasonably confident now that we are able to get the information that we need to pursue any enforcement actions if necessary if there is manipulation taking place.

Mr. YODER. Thank you, Mr. Chairman. I yield back.

Mr. ADERHOLT. Mr. Fortenberry.

Mr. FORTENBERRY. Thank you.

Good morning, Mr. Chairman. I am sorry I did not have the benefit of your earlier testimony so I am playing a little bit of catch-up here, but I did review some of it.

Are the derivatives markets broken?

Mr. WETJEN. I do not believe so, no.

Mr. FORTENBERRY. Do they function well?

Mr. WETJEN. I think they function reasonably well. There is a structural shift taking place on the swap side, as you know, given the reforms over the last several years, and there is going to be some adjustment that goes along with that, but I am not hearing or seeing anything that leads me to believe that there is brokenness in the markets, no.

Mr. FORTENBERRY. Here is why I asked the question, and I think you are probably aware of what I am hinting at. When you have an inverse relationship of what has traditionally been between hedgers and speculators, when you have unexplained price volatility when there is not a disruption of supply, for instance, the very purpose of a derivatives market, which is to hedge risk and decrease volatility and make the market more perfect, actually may be lending itself to increased volatility and market brokenness, and that is the point of my question.

The point in the example here, in 2008, the price of oil shot up to \$145 a barrel. Then it rebounded, came back down. By 2011, there was a run-up of about 20 percent in the price of oil, but gasoline prices went up to their 2008 levels, again, no interruption of supply.

So this unexplainable price volatility begs the question as to whether or not speculation in the market itself is undermining the very purpose of the market to decrease volatility and hedge risk.

Mr. WETJEN. I appreciate the question.

I think I have not studied the data closely. It probably would be confirmed in most studies that certainly there has been perhaps an increase in volatility at least during certain periods of time or the last number of years in the markets. There are a number of possible explanations for that, including the question asked earlier about the presence of high frequency trading firms.

So the trading velocity and the trading volume has changed a lot, but I think the real measure of whether the markets are working or not or the best measure is: Is there sufficient liquidity for those who really need to do traditional hedging? Is there sufficient liquidity in the marketplace for them to achieve that purpose?

By and large my sense is that in most cases anyway that is something that is achievable for them.

Mr. FORTENBERRY. Well, I would not disagree with that, but at what cost given the volatility and what is causing the volatility. Is it basically underlying structures of supply and demand? Not clearly, and so the market itself maybe a factor, a significant factor in the increase of volatility, which is very disruptive to free market economies. In other words, it begs the question of as to whether or not this is functioning properly.

It is a larger academic question. I recognize that and your day-to-day management of trying to ensure there is not fraud of insider trading, all the things that you do maybe do not lend itself to deeper reflection on this purpose, but I think it is important because

the very reason we are talking about giving you more money is because we keep seeing problems here. We do not want any cheating. We want the free market to function properly, but at the same time if the fundamental structures are cracked betraying the very purpose of the market, I think that is something we have to look at and think through.

Mr. WETJEN. Congressman, that is a very thoughtful point and question, and I agree. I think it would be worthwhile to take a step back and maybe look at the big picture and perhaps I could follow up with you after the hearing and figure out a way to do that and maybe get some additional information for you that could be useful. So I am happy to follow up with you on that.

Mr. FORTENBERRY. I would appreciate that.

Thank you, Mr. Chairman.

Mr. ADERHOLT. You mentioned in your testimony that various statistics have been used to measure the increase of CFTC's responsibilities. One thing that is mentioned is the gross notional value of hundreds of trillions of dollars, which is several times larger than the world economy, but the Bank for International Settlements has published its data that would disagree with that.

I would like to look at some other measurements. You are including one, increase in trading volume; number two, increase in customer funds; and number three, increase in registered entities under CFTC.

Using your own statistics, number one, the increase in trading volume for futures is 13 percent. For swaps it is 33 percent. The increase of customer funds is 27 percent. The increase in registered entities is 40 percent.

So the highest metric you have given would be 40 percent. Yet the CFTC's budget since the financial crisis of 2008 has increased 91 percent. Explain to us the request for another 30 percent increase in CFTC's budget.

Mr. WETJEN. Mr. Chair, I appreciate the question.

The way I approached this budget was looking at those different ways of measuring, but also looking at the mission of the agency set out under the statute. I analyzed it by focusing on the number of people we have and then making judgments about the number of people that I thought we needed to execute on those mission activities, focusing, again, on three key ones for me which are enforcement, surveillance, and examinations.

And I just went through the divisions and looked to see, well, how many people do we have doing those three key things in examinations? In the Division of Clearing and Risk, it is a very small number. I think it is around 12 or 13.

In the Division of Swap Dealer and Intermediary Oversight, it is slightly larger because they have more registered entities under their purview, but still a pretty small number. In fiscal year 2013, it looks like it was 48.

And, again, DSIO, that division oversees tens of thousands of entities, either directly or indirectly. Most of those are indirect, but a substantial number are under the CFTC's direct oversight.

So we do not need enough people to look at every single last one of those registered entities year after year, but we need enough to basically keep the entities honest and to do at least a reasonable,

acceptable level spot check of those registered entities, and again, based on the number we have today, we are not able to do that.

Mr. ADERHOLT. You mentioned the CFTC's leverages of resources of self-regulatory structure. The number of regulatory includes around 800 staff plus CFTC's 647 employees, and that would make a total of about 1,450 employees to regulate the industry.

Do you think it would be more transparent to acknowledge the totality of the hard working regulatory staff rather than just CFTC's own in asking for the increase?

Mr. WETJEN. Well, I think the budget request itself does, indeed, acknowledge that. There is a reference to the fact that there is a coordination and cooperation effort with the self-regulatory organizations, and so I can certainly concede that point.

But the types of reviews that the SROs often do is a little bit different than the type of reviews at least focusing on examinations, the sort of examinations that the CFTC staff would be responsible for doing. The CFTC staff ultimately are the ones responsible for providing interpretations about what the regulations actually require, and they look at and do these examinations through a slightly different lens, I would suggest. It is much more risk based. It is much more policy driven, and so with that type of approach and combination with the approach taken by the SROs, I think in the cases where you have both entities involved, both the SRO and the CFTC, that is how you get the best oversight.

But, again, even though that type of cooperation where we are doing it qualitatively, different type of review, and we are not doing it of all the registered entities that the SROs might have direct oversight over, we still do not have enough people to have that level of cooperation.

So, again, that is why the request was made at the number it was requested at, because we need additional staff, additional FTEs focusing on that examination function, just focusing on the examination for now. That does not get into enforcement and surveillance.

Mr. ADERHOLT. Mr. Farr.

Mr. FARR. I find that people are always fighting regulation in politics at whatever level of government you are in, and yet it is the business sector that comes in and asks for regulations. They want licensing. They want standards set up. They want certainty, and certainly financing is of all of them. You know, you want some predictability that you are not going to have a disaster, that some unforeseen circumstances are going to occur because that makes it a lot more risky.

There must be somebody out there in the private sector who wants you to have more staff and do a better job of providing an opportunity for transparency because this is what we are really talking about, is transparency and then where you find anomalies enforcement.

Who are the people that might be interested in seeing you get a bigger budget?

Mr. WETJEN. Mr. Congressman, I could identify them. I could probably give you their phone numbers, too, if you like although I will not do that here.

Now, to be sure, that is, in fact, the case. We have tremendous demands placed on the agency right now, demands for clarifications, petitions for one purpose or another, including relief or including some other action expected or needed from the agency, demands for guidance, demands for interpretation.

So, and I mentioned it a little bit earlier, there are a number of demands on the international front, and as we know, these are global markets, and there are other regulators and jurisdictions who have a say in the oversight of these markets, and there is a tremendous amount of dialogue that takes place between the other regulators around the globe. They have demands. We have demands of them.

Let me give you an example. The European Commission right now is undertaking the number of equivalence determinations, and these are determinations about whether or not some of our rules are sufficiently similar to theirs or whether some of the entities based in the U.S. but operate over in Europe can follow CFTC regulation rather than European regulation. That includes dealers. That includes clearinghouses.

And so there is a tremendous amount of work and time that gets put into having those dialogues and trying to work with these other regulators so that they come out with a good result on their own equivalency determinations.

Mr. FARR. What U.S. entities or companies want better regulation?

Mr. WETJEN. Well, I think my sense is that most participants in the derivatives markets think that confidence is built and there is greater credibility when there is sufficient strong oversight of the markets. When we saw the failures of the two FCMs several years back, it was kind of a jarring event, I think, for a lot of the participants in the futures market, in particular, because that was the failure of a sizable firm. A large number of customer funds were put at risk and tied up in bankruptcy, and I do not know if it was a crisis of confidence, but as I said, it had a real jarring effect. We could sense that at the agency, and it seemed very, very real to me.

So those who are watching that incident very, very closely, I am sure most of them would agree that we need a properly overseen and properly regulated FCM community to make sure that people continue bringing liquidity to these markets that the FCMs intermediate in.

Mr. FARR. Most of your activities you stated are in surveillance, examinations and enforcement. I think that is similar to what our intel agencies do. I am just thinking if you were an intelligence agency before a congressional community and asking for the assets to do this, I doubt that we would be criticizing you in the sense that you do not need the money or you do not need to do the work in order to have the intelligence of our markets, and in this esoteric area of future swaps and options, we need it more than ever.

So I just think that this committee, we ought to think about this. This is our responsibility. Do we really want to handicap this agency at a time when we have enacted the law and told them what to do and then turning around and not allowing them to carry it out it seems to me very dangerous.

Mr. ADERHOLT. Mr. Nunnelee.

Mr. NUNNELEE. Thank you, Mr. Chairman.

The CFTC is involved in a rulemaking change that is going to lower the trigger for transactions from \$8 billion to \$3 billion. How many firms will be added at the \$3 billion trigger that are not covered with the \$8 billion trigger?

Mr. WETJEN. Thank you, Mr. Congressman.

The agency does not know the answer to that right now. The way the swap dealer rule works is that it set the threshold at \$8 billion, which is to last until October of 2017, and there was a request of the chairman, Chairman Aderholt, to try and do some of this analysis sooner, which we can and will do, but we will have to analyze and try and solicit some information from the dealing community itself to get a better handle on that, and we are happy to do that.

But just as far as how the rule operates, the threshold remains in place until 2017. I think originally the thinking was that once we had pretty solid reporting from the SDRs on swap data activity, that would give us an even better handle on how to determine what the level of dealing activity was among these different firms and make a judgment closer to that date, but we can do it sooner if that is the wishes of the committee.

Mr. NUNNELEE. Do you have a feel for a range of the number of firms that may be added by this change in comparison to the number that you are currently regulating?

Is it ten percent more, 100 percent more?

Mr. WETJEN. Honestly, Congressman, now we have 99 swap dealers registered, and I do not have the feel for how many more it would be. I am sure it would be some because we are aware that there are other entities that do the sort of dealing activity that would be encompassed by the swap dealer rule we put in place a couple of years ago, but I would have to get back to you on a better approximation.

Mr. NUNNELEE. That is one of the things we will be interested in, and then as a follow-up, we want to know, okay, how are you going to regulate an increased number of firms while you are requesting less resources.

Mr. WETJEN. Well, you know, on the request, what we requested today would be, I think, a substantial increase above what we have now, but I take your point.

Mr. NUNNELEE. We may be following up with questions for the record on that. Thank you.

Thank you, Mr. Chairman.

Mr. ADERHOLT. Mr. Bishop. I am sorry.

Mr. BISHOP. Thank you very much.

As you know, Dodd-Frank as a part of the CFTC's expanding enforcement obligations created an authorized Whistleblower Program, and it is my understanding that the Securities and Exchange Commission has recently received more attention for its Whistleblower Program. However, whistleblowers have been very active at the CFTC regarding a wide array of fraudulent practices from price manipulation to Ponzi schemes.

In fact, the number of whistleblower claims filed with the FTC has jumped from 58 in fiscal year 2012 to 138 to fiscal year 2013. Can you update us on where the Whistleblower Program is currently with CFTC and what resources are being proposed for next

year, and what are your plans for promoting its existence, including any awards program?

Mr. WETJEN. Thank you, Congressman.

We do, in fact, have a Whistleblower Program that is relatively new. There is a sizable budget for it. I would have to get back to you on the exact number, but as you pointed out, at the SEC we have seen the successes that can come from this program, and there are a lot of referrals that can be generated from this type of program.

So, again, I think it is going to be a nice addition to the program at the CFTC to try to make sure we are responding to any manipulative or fraudulent activity in the marketplace, but I am happy to follow up with you on more specific figures.

Mr. BISHOP. As you know, the CFTC is included in the ag. appropriations bill because of its historical connection to the agriculture markets, but the number and the scope of non-agricultural issues has dramatically grown at the Commission in recent decades.

But despite the growing importance of the non-agricultural issues, agricultural issues still remain a critical component of your work. I am concerned that given the fiscal environment in which we are operating today and the inevitable budget reductions which will occur in every agency of the Federal Government, including yours, the CFTC's management of agriculture markets could possibly get the short end of the stick.

How do we make sure that agriculture does not disproportionately pay for reductions in your budget, combined with the growing pressure you are under to expand the agency's non-agricultural activities, particularly as a result of Dodd-Frank?

Mr. WETJEN. Thank you, Congressman.

You are right. The ag. markets, in particular, have played a special role in the history of the CFTC and also in the history of the markets. I think in a lot of ways they developed in that space and expanded from there, as you said.

We are always trying to be mindful of the special needs or special issues that can materialize in the agricultural asset class, and we try to pay careful attention to that. Just to give you an example, we have a weekly surveillance meeting at the CFTC, and we are going to cover a couple of topics tomorrow that actually relate to agricultural products.

So it continues to be an area of importance, and especially since the underlying commodities of these derivatives contracts are so meaningful and important to the everyday citizen. We always need to make sure we are taking care to understand exactly what is going on in those markets and watch them very carefully.

Mr. BISHOP. Right. Finally, let me ask you, going back to Dodd-Frank and farmers, one of the little known goals of the Dodd-Frank is the facilitation of a more transparent risk management process for farmers and ranchers. But it would appear that the resulting transparency has come at a real cost, particularly to the Nation's farmers and ranchers who utilize futures markets for hedging and are now experiencing dramatically increased risk management costs.

As part of the CFTC's efforts to expand transparency, a new rule governing records of commodity interests and related cash forward

transactions was issued and approved in December of 2012. Under this rule all communications leading to a futures or swap transactions are required to be recorded, including voice and text message recordings.

Voice recording systems can cost upwards of \$50,000, which is likely cost prohibitive for most small to midsize working farmers and ranchers. Several major farm organizations have expressed some concern regarding the rule's recording requirements and their cost effectiveness.

Can you tell us the thinking behind this particular requirement, and was the CFTC aware of the cost impact that this would have on farmers and ranchers?

I am always reminded of a cost-benefit analysis that I feel should always be done when regulations are put in place.

Mr. WETJEN. Congressman, I appreciate the question.

There was a rulemaking on Regulation 1.35, which is the voice recordkeeping requirement that you mentioned. There was a cost-benefit type analysis done under the statute with respect to that rule, as it is done with every rule.

I think it is fair to say that when crafting that rule, and there was an attempt to calibrate it in a way that it was focused on the categories of market participants where you are most likely to see manipulative or fraudulent activity. I think probably, Mr. Bishop, you and I would agree farmers do not normally come to mind.

But we have heard some of these concerns raised as well at the agency, and for that reason, as well as because we are hearing some concerns about some of our other rulemakings that seem to impact the end user community, just this week I announced a roundtable on end user related issues, including 1.35, including the special entity de minimis threshold for swap dealers, as well as this seven-part test for volumetric optionality, which is a long way of saying it is a test to figure out whether or not an instrument is a trade option or not.

And so we are going to host a roundtable to talk through more detailed issues related to the rulemaking that you mentioned, and we will be doing that later this month, actually in early April.

Mr. BISHOP. Is there a likelihood that you might provide a little relief?

Mr. WETJEN. Well, I think we are very much in fact finding mode. Again, if I could characterize it this way, and I am sure staff in the building at the CFTC might have more detail, but right now it is just noise, and so we need to get to the bottom of it, and that is the purpose of the roundtable.

Mr. ADERHOLT. Mr. Yoder.

Mr. YODER. Thank you, Mr. Chairman.

On the topic of transparency, you are the CFTC's rep. on the Financial Stability Oversight Council, FSOC, which was created by Dodd-Frank as one of the many regulations to create certainty and predictability in the markets and protect consumers, again. It has come under some criticism for being weak in terms of transparency, in terms of who is being regulated, why they are being regulated, how those things are arrived at.

And I wonder if you can assure the committee that you will help do everything you can to increase the transparency on the FSOC

so that American stakeholders, all of us, can ensure that we know what is going on and why it is happening.

Mr. WETJEN. Mr. Congressman, I appreciate the question.

I agree transparency is important. I will point out additionally that under Dodd-Frank there are a number of responsibilities given to the FSOC, as I am sure you are aware, including certain designations, systemic designations, of certain financial institutions, and there is a lot of sensitivity around that process for reasons I am sure you can imagine and are aware of.

And so there has to be some balancing between the need for transparency, but also the need to make sure that some of the sensitive information that is discussed in the context of these FSOC meetings is kept close. But I am more than happy to continue talking with you about ways to improve transparency around FSOC where appropriate.

Mr. YODER. Well, I think anything we can do to ensure that Americans know why its government does what it does and what its rationale is and give voices to folks that do not normally have a voice in the process to ensure that when oversight is occurring, it is being done consistent with what congressional intent is, with what Americans want.

I think my colleagues on both sides of the aisle would argue that we should always err on the side of transparency, absent, you know, national security questions or other things of classified nature. The idea that the deliberations of the FSOC would be less transparent or not be fully open to the public, I think, is concerning to a lot of us, and it weakens the effectiveness of those who would hope that we do a better job of oversight in the country.

Finally, as you know, the CFTC's inter-affiliate rules do not just impact bank. They impact end users. They certainly have an effect on folks all across the country. As market participants work to come into compliance with new regulations, what will you do to ensure a smooth market transition?

And will you work with market participants to provide relief when necessary?

And, for example, the inter-affiliate exemption from clearing requirements will soon expire. How can the CFTC ensure that this does not have unintended consequences or market disruption?

Mr. WETJEN. Well, you mentioned the inter-affiliate clearing exemption for clearing, and there is an actual Commission action that is outstanding that expires on March 11th, as you mentioned. The extension of that has been circulated around the commission, and that will be released today.

As far as orderly transition more generally, we have had to respond at the commission in a way over the last several years to ensure that very same thing that you mentioned, and there has been no actual relief that has been issued. There has been interpretive guidance issued and the like and we will continue to do that as necessary. In fact, we had to do it recently in the run-up to the effectiveness date of our trading mandate, and so some issues were brought to the Commission's attention regarding certain types of trades that are commonplace in the market, important for participants to continue doing, but there is not a state of readiness in the

infrastructure for swaps to continue trading those on a regulated sub-platform. So we had to provide relief there.

So that is just another example of what we needed to do, and I hope indicates the continued openness to doing that where necessary.

Mr. YODER. I appreciate it.

Thank you, Mr. Chairman.

Mr. ADERHOLT. Ms. DeLauro.

Ms. DELAULO. Thank you, Mr. Chairman.

The CFTC, unlike most other financial regulators, is dependent upon an annual appropriation from the Congress, and it has no reserve fund. I am not sure everyone understands this. Quite frankly, the other four main financial regulators have in some parts some self-funding mechanisms, and CFTC does not.

When the government shut down last October, the equity markets were still overseen by the Security and Exchange Commission. Federal Reserve was open for business, and yet futures and most swap markets were left with essentially no cop on the beat.

What happened or, rather, what activities were halted during the government shutdown?

And the second part of that is would a fee-based system outside of the appropriations process add more certainty, if not more resources, to your work?

Mr. WETJEN. Thank you, Congresswoman.

The time of the shutdown was unfortunate. We were only able to have essential staff at the agency during that time.

Ms. DELAULO. So you had to furlough?

Mr. WETJEN. I suppose it is another way of putting it, you know, and so essential staff was present. So some of the key function areas of the agency had folks devoted to that during that time, but most of the agency, you know, was not in the office during the shutdown.

So it was a little bit unfortunate, too, in the sense that we are also overseeing another key implementation date at the time. It was when the self-registrations became effective. So that created a number of different issues that had to be dealt with and made it especially difficult that we had so many staff away.

Certainly I would think a user fee would—

Ms. DELAULO. Let me just on the point you just made. What activities were halted during that shutdown?

Mr. WETJEN. Well, I do not know. I would have to go back and get back to you, Congresswoman, because essential staff was allowed to come in, and so we probably had key people, at least the division directors, for example, there.

Ms. DELAULO. I would like to, and if you can get back to me on that, I would like to know what interruptions there were in the course. You know, something had to give.

Mr. WETJEN. Yes.

Ms. DELAULO. Something had to give.

Mr. WETJEN. There was not typical, normal operation, no.

Ms. DELAULO. Okay. So please let me know what the result of that was.

Mr. WETJEN. Sure.

Ms. DELAULO. And I am sorry. I interrupted you on the fee.

Mr. WETJEN. Yes, just on the fee, I mean, obviously that would be very, very important in terms of certainty, and it would give us a better ability I would think, too, to plan because you would be able to predict based on the calibration of the fee or however it is designed.

Ms. DELAURO. As action tax, what?

Mr. WETJEN. Yes, I think what the President's budget recommended was as user fee. So it is something like a transaction tax, but the details would have to be worked out later.

Ms. DELAURO. Your colleague, Mr. Chilton, said at a President's request, "This budget asks a strained and exhausted CFTC staff to do the impossible with too little. We work hard here. We have been granted needed regulatory tools to do the job. A magic wand, however, is not among those tools, and we are not magicians. The agency requires basic minimal support to accomplish our newly assigned tasks. Sadly, in this regard, the President's budget request fails."

In your testimony you stated that the CFTC is not able to complete its mission at current funding levels. Is the President's request enough for the CFTC to complete its mission?

And then I have a follow-up question.

Mr. WETJEN. I believe this request will put is at a level with respect to FTEs or staff to be able to execute on those three key core areas that I mentioned, enforcement, surveillance and examinations.

Obviously, with even more resources we can do even more and do an even better job, I believe, but I think at the request level we would be on the pathway towards sustainability in terms of what we need to continue executing the way that I think the American public needs us to.

Ms. DELAURO. Again, according to Commissioner Chilton, your limited resources have already led to slow investigations and the prioritization of enforcement cases. What is your investigations backlog?

Are cases going uninvestigated?

And are we setting ourselves up for the next MF Global or worse, another Great Recession, and that is about underfunded priorities? Can you?

Mr. WETJEN. Yes. On the——

Ms. DELAURO. What is the investigations backlog?

Mr. WETJEN. I would have to get back with you on specifics, Congresswoman, but again, just speaking generally, the fewer resources we have means the fewer people we have, which means that there is just going to be a lessened ability to pursue referrals that come in from folks on the outside or the Whistleblower Office that Congressman Bishop mentioned or referrals that come in from our Division of Market Oversight, which surveils the markets, leverages technology to do that, but we are not going to be able to pursue all of those leads, if you will, and do the sort of investigation that we might otherwise like to do if we are constrained.

Ms. DELAURO. Let me, if I can, I was just handed a piece of information, and my colleagues may be aware of this. The CFTC was unable to file charges—and that was my next question: what cases are going uninvestigated?—unable to file charges against certain

individuals in the London Whale case because it did not have the funds to do that.

This is from the head of Enforcement at CFTC in an interview with the Wall Street Journal last year. So I would also like to know what cases are going uninvestigated. That would, I think, bear some light for this committee to know what we are doing.

I happen to believe that the budget is not enough. I heard your answer to that.

Mr. WETJEN. Well, you and I agree on that. All right. Let me give you another example. There are two major cases underway right now. One is the MF Global bankruptcy proceeding as well as the MF Global enforcement actions, and to do an able job in those matters we need to have expert witnesses. That is another thing that has not been discussed, but it is critical to bringing a successful complex case, and again, if we do not have enough resources, we are not going to have the experts that our litigants need to be successful in court.

Ms. DELAURO. Well, that leads me to what I had asked before about are we setting ourselves up for the next MF Global or worse, another Great Recession, as a result of shortchanging the resources to this regulatory agency which has been handed an exceptional amount of increased responsibility and with fewer funds than it needs in order to be able to carry out that mission.

Could we look at another MF Global?

Mr. WETJEN. It is certainly conceivable. Again, that goes back to the examinations function. To be confident that we are not going to see a situation like that again we need regular thorough examinations, not duplicative examinations, because the chairman's point is certainly right. There are other entities involved in this process, but just to do the sort of spot checking of the front line examiners, that is not being done now. It is not.

And I was actually writing this in a conversation earlier this week. There was a time before, before these increased responsibilities, where you would see more of that, but again, we just do not have the staff among the examinations team to do that minimal level of examination.

Ms. DELAURO. If I could just ask you to provide I would like to.

Thank you, Mr. Chairman, for your indulgence.

If you can, what I would like to know from you is at what level of funding are you able to carry out the regulatory function and mission that you have been tasked with. And I am not saying, you know, pie in the sky. I am asking you to let us know what this agency needs to be able to do its job and to be able to save maybe another \$1.7 billion, help us to decrease the deficit, and just in terms of carrying out your operations.

Thank you so much.

Mr. ADERHOLT. Mr. Rooney.

Mr. ROONEY. Thank you, Mr. Chairman.

Mr. Wetjen, in a Senate Banking Committee hearing last summer, former Chairman Gensler testified that the CFTC has clear authority to police the physical and derivative markets for aluminum. He also stated that the London Metals Exchange is operating under a no action letter agreement with the CFTC as a Foreign Board of Trade or FBOT. It is expected that the Foreign Board

of Trade will maintain the same quality of market expected by American consumers and is typically exhibited in domestic exchanges regulated by the CFTC, such as the Chicago Mercantile Exchange and the International Commodity Exchange.

Do you agree with those statements by your predecessor that the CFTC has the authority to regulate this FBOT?

Mr. WETJEN. Thank you, Mr. Congressman.

I will have to confirm this to be sure, but I am nearly certain that the LME has applied to become a Foreign Board of Trade. That is a relatively new rulemaking that was passed. In fact, it was one of the first rules I voted on. So it was finalized just a couple of years ago.

But again, back to the overall discussion about resources at the agency, we are continuing to work through those applications, and that is another area that I have not focused on as much today during this testimony, but we also need staff to be reviewing these registration applications that are coming in from not on FBOTs, but other registration categories as well.

Mr. ROONEY. Okay. Well, the second part of the question is less about manpower and resources as opposed to your opinion on the matter when it comes to specifically an example. The Metro International Trade Services' waiting period for aluminum has grown from six weeks to 16 months since being purchased by Goldman Sachs. The company holds 1.5 million tons of aluminum, and this manmade backlog was created to drive up the commodity premium for profit, and it has cost American consumers, more than five billion over the last three years.

Do you believe in your opinion that this type of behavior in the market violates the conditions of the no action letter that I referred to in the first question?

Mr. WETJEN. Congressman, I have to get back to you because it would depend in part on the actual terms of the no action relief, but apart from that, as you alluded to in the earlier part of your question, we always have manipulation authority over the underlying commodity if it is something that is being used in interstate commerce. So we would have that authority in any event.

I am not sure, and I can get back to you on this, but I am not sure exactly what the conditions and terms of the relief LME is operating under are, but again, I also think they have applied to become a Foreign Board of Trade, and there would be a number of obligations it would have to adhere to as a registered FBOT at the CFTC.

But I can follow up and give you more details about how the no action relief they are under now actually operates.

Mr. ROONEY. Thank you, sir.

Thank you, Mr. Chairman. I yield back.

Mr. ADERHOLT. Mr. Farr.

Mr. FARR. Did I hear you right that you oversee 400 trillion?

Mr. WETJEN. Yes. The notional value of the swap market fluctuates globally, but the last I checked I think it is somewhere between four and \$500 trillion, yes. That is the outstanding notional value.

Mr. FARR. And we are arguing over a budget increase of 65 million?

Ms. DELAURO. Yes.

Mr. FARR. You know, I think your budget sucks, to put it in the street language. [Laughter.]

And I am glad this hearing has all been recorded and taken down because if anything goes wrong, I want people to reflect back on March 6th, 2014 to the ag. appropriations hearing, just to reflect on, you know, that we asked you these questions about this responsibility.

I think the Administration is underfunding you. I mean, you got 100 million less than what you asked for last year, and now you come back in and certainly needed that 100 million and are only asking for 65 million.

I mean we are just sitting here trying to figure out how much 400 trillion is. Nobody in all of our bright staff back here can figure it all out. It is a lot of money, and you are not open seven days a week. So this is more than a trillion a day.

Mr. WETJEN. It is a substantial marketplace, sir. There is no doubt it is huge.

Mr. FARR. Well, what is the worst case scenario? What happens if you fail, if somebody gets by your surveillance, examinations or lack of enforcement?

Mr. WETJEN. Well, I think maybe one way to answer it, Mr. Congressman, would be to just look back over the last six years or so, and we have seen what happens when you have major participants in the derivatives marketplace fail, and we have seen several examples of that, and it had a reverberating effect throughout the financial system.

I am not suggesting that the only cause of those failures was the activities of those firms in the derivatives markets, but it gives you some sense of how bad things can get if these markets are not overseen properly. There is just no doubt.

Mr. FARR. Has anybody figured out what that value is, how many trillions that is?

Mr. WETJEN. I am sorry. Trillions?

Mr. FARR. Of what the market, the negative, does that reach.

Mr. WETJEN. I mean, what did we lose, eight million jobs, as a result of the financial crisis?

Mr. FARR. Just in this country.

Mr. WETJEN. Yes.

Mr. FARR. I think we are getting the point across. I have been on this committee a long time, and I have to admit that not many people in Congress or this country understand what this trading commission does. You are the only one that is not self-funded, I understand. I mean, all of the others have a user fee.

Mr. WETJEN. Yes.

Mr. FARR. And you collected \$1.7 billion in fines.

Mr. WETJEN. Yes, the SEC has a bit of a hybrid system, but yes.

Mr. FARR. And we cannot even give you another 65 million when you have collected a gazillion times more than you are asking for?

I mean, I think I am just trying to plead with my committee members and our colleagues that this is really an important responsibility. You know, most of us here in Congress are just ordinary people, and we do not have a lot of background in financial markets and things like that, and I do not think most of us could

discuss intelligently swaps and options and futures, and yet we have that responsibility in this committee.

And I am just pleading with my colleagues that I do not think we want to play loosely with your budget, particularly when you are in a new realm after what we have gone through. You are the future. You know, we are supposed to fix things that are broken, and we learned that this was broken and it had a very serious, detrimental effect to the American economy, to the world economy, and now we are going to try to make sure it does not happen again.

And we are—I cannot say that publicly—we are just kind of being a penny wise, pound foolish right here, and I hope that our committee will follow your request and fully fund you.

Thank you, Mr. Chairman.

Mr. ADERHOLT. Thank you.

Well, thank you, Mr. Chairman, for your testimony. Of course, I think good people can disagree on exactly how the funding and dire need of resources and look at this, but we have taken your testimony into consideration, and we certainly understand that you have an important responsibility and that what you do is no small thing, and so we do understand that.

We want to provide the resources that you need, but at the same time we want to make sure that we are responsible to the taxpayers and find that medium and happy balance between the two.

So, again, we appreciate your work at the Commodity Futures Trading Commission, you and all of your colleagues, and so we look forward to working with you on this as we continue through the hearing process and through the fiscal year 2015.

Thank you.

Mr. WETJEN. Thank you very much, Mr. Chairman. Thank you.

Mr. ADERHOLT. The subcommittee stands adjourned.

COMMODITY FUTURES TRADING COMMISSION
QUESTIONS FOR THE RECORD
HOUSE AGRICULTURE APPROPRIATIONS SUBCOMMITTEE HEARING
MARCH 6, 2015

QUESTIONS SUBMITTED BY CHAIRMAN ROBERT ADERHOLT

UNNECESSARY FURLOUGHS

Mr. Aderholt: CFTC has taken actions in the past that do not reflect an agency in dire need of resources but has made decisions based upon questionable judgment. On October 24th, the CFTC announced there would be furloughs of up to 14 days in Fiscal Year 2014, including three days before January 15, 2014. This was regardless of the fact that CFTC had legal authority to avoid these furloughs contained in Section 112 of the Continuing Resolution. After implementing two furlough days, CFTC used this authority on January 2nd, 2014.

Please detail the costs associated with these two furlough days, including amount of compensation and benefits lost per employee, total compensation and benefits among all employees, and methods for restoring lost compensation to employees.

Response: The two furlough days resulted in a total savings to CFTC of approximately \$869,000 in employee salary and benefit costs. On average, each CFTC employee lost \$1,089 in pay and \$225 in benefits due to the two furlough days. CFTC did not restore lost compensation, in any form, to employees.

Mr. Aderholt: Does CFTC need new legislation or legal authority to payback employees for the lost furlough days? Does CFTC plan to provide compensation in any other form to CFTC employees to make up for the lost pay from the furlough days?

Response: CFTC does not plan to provide compensation in any form to payback employees for lost pay from the furlough days. Accordingly, CFTC is not seeking new legislation or legal authority to payback employees for the lost furlough days.

Mr. Aderholt: Please submit for the record all memoranda, emails, and other pertinent documentation and information relevant to the decision making and implementation leading up to and at the execution of the two furlough days in Fiscal Year 2014. Please include the same for the decision to seek an excepted apportionment in January 2014 under Section 112 of Public Law 113-46.

Response: Please see *Appendix 001* for the furlough and exception apportionment documents.

BONUSES, PERFORMANCE AWARDS, AND SPECIAL PAY

Mr. Aderholt: How much in bonuses, which includes special pay, incentive awards, merit pay, and performance pay, were distributed to CFTC employees and contractors in FY 2013?

Response: CFTC did not provide monetary incentive awards in FY 2013. CFTC paid \$91,000 in retention allowances and distributed a Merit/Performance pay increase of up to 1% in FY 2013.

Mr. Aderholt: How much does CFTC plan to spend on bonuses, which includes special pay, incentive awards, merit pay, and performance pay, in FY 2014? And assumed under the President's FY 2015 Budget Request?

Response: In FY 2014, CFTC currently plans no incentive awards, a 1% COLA effective Pay Period 1, and a Merit/Performance pay increase of up to 3.4% effective Pay Period 14.

The FY 2015 President's Budget Request includes a 1% COLA effective Pay Period 1, a Merit/Performance Pay increase of up to 2.5% effective Pay Period 14, and an incentive award pool equal to 1% of total salaries.

Please see the following response for costs associated with planned COLA and merit increases in FY 2014 and FY 2015.

Mr. Aderholt: Please provide the costs associated with pay increases for FY 2014 and FY 2015.

Response: The information requested follows:

Pay Adjustment	Effective Pay Period	FY 2014 Cost	FY 2015 Cost
1% COLA	Jan 2014 - PP1	\$708,414	\$944,552
3.4% Merit Pay	Jul 2014 - PP14	\$810,898	\$3,243,592
1% COLA	Jan 2015 - PP1	N/A	\$1,051,993
2.5% Merit Pay	Jul 2015 - PP14	N/A	\$885,427

Mr. Aderholt: The FY 2015 budget proposal includes \$2,578,000 for changes in personnel compensation in FY 2014. Please describe in detail what these funds will be used for. Will this be for bonuses or a pay increase?

Response: The estimated personnel compensation costs of \$2,578,000 in FY 2015 are the "current services" costs of maintaining the anticipated end of FY 2014 staff of 695 on board through FY 2015. It includes an estimated benefits cost increase of 1% effective Pay Period 1, a 1% COLA effective Pay Period 1, and a 2.5% Merit/Performance Pay increase effective Pay Period 14. The president's budget request for FY 2015 also provides for an incentive award pool equal to 1% of total salaries for the anticipated 695 employees.

UNIONIZATION OF EMPLOYEES AT CFTC

Mr. Aderholt: Please describe current efforts at CFTC to form any type of working group, advisory committee, or any ongoing discussions related to

the formation of a union, guild, or employee association. Please provide any documentation related to these efforts.

Response: CFTC is not currently engaged in efforts related to the formation of a union, guild, or employee association, although we continue to work with our existing unions on addressing terms and conditions of employment for bargaining unit staff, as required by statute. However, there have been press reports of some Commission staff in Washington, D.C. meeting to discuss the formation of a union.

RECOVERIES OF PRIOR YEAR OBLIGATIONS AND CARRYOVER OF FUNDS

Mr. Aderholt: Please provide a table from FY 2008 to present detailing recovery of Prior Year Obligations with amounts for each year. In separate tables, please break down each year's recovered funds by object class.

Response: The information requested follows:

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Prior Year Recoveries	\$3,990,815	\$930,496	\$812,898	\$1,448,576	\$6,327,442	\$3,885,172
Prior Year Upward Adjustments	(4,900,558)	(417,106)	(304,384)	(289,231)	(359,094)	(598,368)
Net Prior Year Adjustments	(\$909,744)	\$513,390	\$508,514	\$1,159,345	\$5,968,348	\$3,286,803

Mr. Aderholt: Please provide a table from FY 2008 to present detailing available carryover funds with amounts for each year. Please indicate which year the funds were carried over from and which account- Information Technology, Personnel Compensation & Benefits, etc. they were carried over from.

Response: The information requested follows:

Unobligated Funds Brought Forward Oct 1	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
Customer Protection Fund	\$0	\$0	\$0	\$0	\$23,755,000	\$99,996,749	\$98,986,700
Available for Obligation	\$0	\$0	\$0	\$0	\$23,755,000	\$99,333,749	\$98,986,700
Unavailable for Obligation	\$0	\$0	\$0	\$0	\$0	\$663,000	\$0
Information Technology	\$0	\$0	\$0	\$0	\$0	\$349,880	\$850,617
Available for Obligation	\$0	\$0	\$0	\$0	\$0	\$349,880	\$850,617
Unavailable for Obligation	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Salaries and Expenses	\$6,986,081	\$4,746,653	\$2,893,603	\$2,944,832	\$13,601,190	\$9,821,785	\$5,131,169
Available for Obligation	\$0	\$0	\$0	\$0	\$9,880,057	\$5,912,304	\$1,345,309
Unavailable for Obligation	\$6,986,081	\$4,746,653	\$2,893,603	\$2,944,832	\$3,721,133	\$3,909,481	\$3,785,860

MISSION ACTIVITIES

Mr. Aderholt: Please describe the FY 2015 increase for registration activities of 25 FTE and \$5.5 million. Commissioner O'Malia's dissent to the

FY 2015 budget request states that the National Futures Association already has 100 staff dedicated to Swap Dealer oversight compliance and registration. Please in detail provide the amount of funds and FTEs CFTC plans to dedicate specifically towards efforts to follow and validate NFA's work with Swap Dealers.

Response: The FY 2015 increase for the registration activities is focused on adding staff in the Divisions of Market Oversight and Swap Dealer and Intermediary Oversight. The increase in FTEs for registration accounts for an increase in the number of registrants with the Commission, including such registrants as swap dealers, major swap participants, swap execution facilities, derivatives clearing organizations, swap data repositories, designated contract markets, and others. Moreover, this increase also reflects the Commission's use of FTEs for registration purposes from across divisions.

The CFTC does not presently allocate funds or FTEs solely for efforts to follow and validate the NFA's work with swap dealers. However, at this time, CFTC has 14 FTEs dedicated to compliance-related reviews of the 102 provisionally registered swap dealers, as well as the two provisionally registered major swap participants. Registrant examinations personnel may devote a portion of their time to swap dealer-related examination activities as well. These CFTC personnel, however, serve fundamentally different regulatory functions than compliance personnel employed by the NFA. The NFA administers the registration process and provides front-line compliance oversight. The CFTC's staff, on the other hand, interprets applicable law and legal requirements and undertakes targeted compliance oversight to fulfill obligations under the Commodity Exchange Act. As part of that work, CFTC staff undertakes a limited, substantive review of a sample of the swap dealer applications to assess whether the compliance policies and procedures written by the applicants meet the letter and intent of the law. The staff also uses this review to provide NFA and the swap dealer community critical guidance on the substantive meaning of the regulations. This review is especially important now because swap dealers are registering with the CFTC for the first time, and thus both the NFA and CFTC are overseeing that process for the first time. The CFTC must ensure that administrative decisions made during this process are based correctly on the CEA and rules promulgated thereunder given the significant precedential impact they will have.

In addition, CFTC staff reviews and addresses issues related to the swap dealer quarterly risk reports and annual chief compliance officer reports that are delivered to the Commission, not NFA. Finally, CFTC examinations and compliance staff may undertake targeted examinations of swap dealers as it has done, and continues to do, with other registrants such as FCMs.

Mr. Aderholt: Does CFTC plan to submit a reprogramming regarding this activity for FY 2014?

Response: CFTC does not plan to submit a reprogramming for this activity for FY 2014.

Mr. Aderholt: CFTC's Examinations proposal in FY 2015 requests an increase of 63 FTE. How many clearinghouses or DCOs has CFTC reviewed or

examined in FY 2013 and FY 2014? Please provide the FTE, length of time, whether site visits were required, and amount of funds required for each.

Response: The information requested follows:

SIDCO Examinations pursuant to Title VIII of the Dodd-Frank Act:

In July of 2012, two DCOs, for which the CFTC is the Supervisory Agency under Title VIII of the Dodd-Frank Act, were designated by the Financial Stability Oversight Council as being systemically important (i.e., a SIDCO).¹

Under section 807(a) of the Dodd-Frank Act, a Supervisory Agency (and in this case the Division of Clearing and Risk's Exams Group) must examine each SIDCO "at least once annually" to determine (1) The nature of the operations of, and the risks borne by, the SIDCO; (2) The financial and operational risks presented by the SIDCO to financial institutions, critical markets, or the broader financial system; (3) The resources and capabilities of the SIDCO to monitor and control such risks; (4) The safety and soundness of the SIDCO; and (5) The SIDCO's compliance with (A) Title VIII of the Dodd-Frank Act, and (B) the rules and orders prescribed under Title VIII of the Dodd-Frank Act. As a result, SIDCO examinations take priority over examinations of other DCOs and, due to the systemic importance of each SIDCO, such examinations are carefully executed and are extremely time consuming for the DCR Exams Group.

Moreover, Title VIII of the Dodd-Frank Act requires Supervisory Agencies to consult with the Board of Governors of the Federal Reserve System (Board) regarding the scope and methodology of each examination, and to permit the Board to participate in each examination. These Board consultations require multiple internal CFTC meetings. CFTC staff time spent on such internal meetings is estimated at 75 hours per examination. In addition, the Board accompanies the DCR Exams Group on all SIDCO exams. Thus, coordination efforts have doubled for the DCR Exams Group with respect to preliminary exam activities, such as scheduling fieldwork meetings, sharing preliminary information with the Board, and preparing document requests for each SIDCO.

During each SIDCO exam, the DCR Exams Group reviews between 1,000 and 1,500 documents, and spends on average 4 to 6 weeks at the SIDCO's offices performing fieldwork. Fieldwork consists of a series of on-site meetings with SIDCO management and relevant staff, and "walk-throughs" of relevant processes. For example, the DCR Exams Group typically meets with the SIDCO's risk management, operational and legal staff, and executives. The DCR Exams Group may also sit with and question a SIDCO's operating staff to observe and evaluate the SIDCO's operations, such as observing a SIDCO's daily settlement process.

¹ Chicago Mercantile Exchange, Inc. ("CME") and ICE Clear Credit LLC ("ICE Clear Credit") are the CFTC-registered DCOs that were designated systemically important by the Council, for which CFTC is the Supervisory Agency. See Press Release, Financial Stability Oversight Council, Financial Stability Oversight Council Makes First Designations in Effort to Protect Against Future Financial Crises (July 18, 2012), available at <http://www.treasury.gov/press-center/press-releases/Pages/tg1645.aspx>

Because the DCR Exams Group and the two SIDCOs are located in Chicago, travel expenses are mitigated. Each SIDCO exams takes at least 6 months to complete, plus any additional time necessary to effectively coordinate with other regulators. The DCR Exams Group met the annual examination requirement for both SIDCOs in FY 2013, and is on target to meet the annual examination requirement in FY 2014.

DCO Examinations pursuant to the Commodity Exchange Act and CFTC Regulations:

Under the Commodity Exchange Act, a DCO that is registered with the CFTC must comply with 18 core principles as well as all implementing CFTC regulations. These core principles encompass all aspects of clearing and, given their breadth and complexity, measuring a DCO's compliance with them requires sophisticated analysis of a broad range of topics including, but not limited to, the adequacy of a DCO's financial, operational, and managerial resources, the DCO's ability to manage all risks associated with clearing and settlement, including whether the DCO uses appropriate tools and procedures to monitor such risks, whether the DCO's risk analysis and oversight program is able to accurately identify and minimize sources of operational risk, and a DCO's ability to resist, and to minimize any potential damage from cyber security threats.

In FY 2013, the DCR Exams Group did not have enough staff to perform examination of the 12 DCOs that were registered at that time. As such, the DCR Exams Group performed a risk assessment of the registered DCOs to determine which DCOs, other than the SIDCOs, appeared to have the greatest market share in cleared products. Based on this risk assessment, the DCR Exams Group determined to select only a small subset of the DCO community for review. Staffing constraints effectively resulted in the examination of two DCOs that have not been designated as systemically important for FY 2013. Delays and staff attrition resulting from the government shutdown and furloughs have impacted FY 2014 examinations and, unless additional resources are allocated to the DCR Exams Group, it is unlikely that the CFTC's staff will be able to examine more than 1-2 DCOs (in addition to the SIDCO examinations described above) per year.

A DCO examination takes approximately 6 months to complete. On average, fieldwork takes approximately 3 weeks to complete, and typically consists of a series of on-site meetings, and "walk-throughs." Of the 16 registered DCOs, 5 are located outside of the US, and obtaining travel funds for on-site examinations of these entities has been challenging.

Subpart C DCO (Qualifying Central Counterparty) Examinations:

A number of DCOs have elected to be subject to heightened standards under Subpart C of the Commission's Part 39 DCO regulations in order to achieve status as Qualifying Central Counterparties under the Basel Capital Framework. As discussed in more detail below, U.S. and international bank capital standards provide incentives for banks, including their subsidiaries and affiliates, to clear derivatives through Qualifying Central Counterparties by setting lower capital charges for exposures to a Qualifying Central Counterparty. Thus, obtaining and maintaining Qualifying Central Counterparty status may have significant business and operational implications for U.S.-based DCOs in that a DCO's failure to be a Qualifying Central Counterparty may cause it to face a competitive disadvantage

retaining members and customers. Because of staffing shortages, a DCO's compliance with the requirements that are relied upon for its status as a Qualifying Central Counterparty might not be examined at all during the annual examinations cycle. And, although the CFTC still engages in other oversight activities such as DCO rule review and daily risk surveillance, those activities are not substitutes for in-depth, targeted examinations. The inability of CFTC to complete such examinations may have significant negative effects on both FCMs and DCOs. For example:

- FCMs, as clearing members, benefit from our ability to ensure that the DCOs meet effective standards, and their ability to benefit from the lower capital charges under the Basel Capital Framework may suffer if the CFTC is viewed as unable to hold DCOs to such standards.
- DCOs that want to operate internationally tell foreign regulators that they are supervised by the CFTC; those regulators then look to CFTC regulation as a qualification for the U.S. DCO. As the CFTC's ability to actually examine DCOs becomes more strained, the claim that foreign regulators should permit DCOs to do business in their jurisdictions in reliance on CFTC regulation becomes more tenuous.
- Similarly, banking regulators may come to doubt the wisdom of reliance on CFTC regulation to qualify DCOs as Qualifying Central Counterparties, which would create higher capital charges for participating FCMs and bank customers. This, in turn, could cause participating firms to transfer their derivatives business away from U.S.-based DCOs, thereby creating a competitive disadvantage for those DCOs.

Other Activities performed by the DCR Exams Group:

The DCR Exams Group is responsible for (1) reviewing all quarterly submissions from DCOs to evaluate compliance with the CFTC's financial resource requirements (there were 86 filings last year); (2) reviewing the certified financial statements of each DCO (there were 16 filings last year); (3) reviewing the notice filings from all DCOs (there were 162 filings last year); (4) assisting with DCO applications by reviewing information supporting the DCO applicant's compliance with certain core principles; (5) assisting the review of SIDCO material rule change filings; and (6) assisting the CFTC's efforts to improve its technology resources by, for example, identifying information technology tools needed to complete examinations and helping test newly developed software.

SYSTEMICALLY IMPORTANT FINANCIAL INSTITUTIONS (SIFIS)

Mr. Aderholt: Please provide a list of all the SIFIs under the CFTC's jurisdiction that have been designated as such by the Financial Stability Oversight Council. Please include Global SIFIs as identified by the Financial Stability Board.

Response: Swap dealers that are FSOC-designated SIFIs fall under the CFTC's jurisdiction.² The requested list is provided in another response that follows.

CFTC RESEARCH CONFERENCE

Mr. Aderholt: Please provide general information related to the 2013 annual CFTC Research Conference including purpose, attendees, location-including hotel, and total cost broken out into detailed line items. Please provide the plans for the 2014 and/or 2015 conference including purpose, attendees, location, and total cost for each conference broken out into detailed line items.

Response: There was no CFTC Research Conference in 2013. There are no current plans for a conference in 2014 or 2015.

DAYCARE

Mr. Aderholt: Please provide total costs related to the planned daycare facility at CFTC.

Response: CFTC does not have plans to create a daycare facility.

HAND ENTRY OF DATA

Mr. Aderholt: Does the Commission still receive data via paper copies and faxes? Is this information entered by hand into computer databases?

Response: Any document or form required to be filed with the Commission may be emailed in lieu of paper or fax. The CFTC Portal now accepts the following forms or documents via direct electronic submission: Monthly and Quarterly Reporting for DCOs, DCMs, SEFs, and SDRs and Event specific reporting for regulated entities. Documents and forms not yet received directly through the portal are either emailed or scanned. Manual data entry by staff is limited to metadata required for document control via the Filings and Actions (FILAC) system and the transfer of data from Forms 102 and 40 into the Integrated Surveillance System (ISS).

Mr. Aderholt: Please provide a list of all forms and data in FY 2013 that CFTC receives via paper copies, fax, or other hard copy. Please provide the number of forms received in hard copy per each form in FY 2013. Please provide the FTE and amounts expended on this function.

Response: Monthly and Quarterly Reporting for DCOs, DCMs, SEFs, and SDRs and Event specific reporting for regulated entities are received through the CFTC Portal. CFTC receives the following documents and forms via email/paper/fax: Organizational and product registrations, rules, events, and

² Financial Stability Oversight Council - Designations (Dec. 12, 2013), <http://www.treasury.gov/initiatives/fsoc/designations/Pages/default.aspx#nonbank>

actions, Forms 40, 102, 204, 304. Approximately 8,100 documents and forms were received in hardcopy and scanned in FY 2013. Approximately 6 FTEs are dedicated to receiving documents and forms via email/paper/fax.

Mr. Aderholt: Please explain any obstacles to CFTC receiving these forms or data in electronic format.

Response: The Commission continues to work toward receipt of all documents and forms via direct submission to the CFTC.gov portal. Budget constraints have slowed the pace of systems development and co-requisite business process re-engineering for this migration, but we have continued to make progress under all funding scenarios.

OFFICE OF THE CHIEF ECONOMIST ACADEMIC RESEARCH PROGRAM

Mr. Aderholt: Recently in the Office of the Chief Economist where the cost-benefit analysis takes place, an internal gag-order was put on academics in the Research Program due to supposed data leaks. Reports say there are controls in place to have proper clearance from attorneys before data is made available for research. A review by the Office of the Inspector General on these controls has been completed and is waiting for clearance. Please explain in more detail the situation.

Response: In December 2012, as a result of a series of questions raised by the Chicago Mercantile Exchange about the use and possible disclosure of Section 8 protected information in the Office of the Chief Economist (OCE), then-Chairman Gary Gensler temporarily suspended publication of individual research papers and restricted access to non-public data to full-time CFTC employees. In January 2013, Chairman Gensler requested that the Office of the Inspector General (OIG) investigate issues identified in onboarding staff in OCE, physical and information security, and legal review of papers to ensure no confidential data was improperly disclosed.

During the pendency of the OIG review, the economists at the Commission continued to play a vital role in analysis and research to fulfill the mission of the OCE, the Commission, and the CEA. The Commission is authorized by Section 18 of the CEA to maintain a research and information program. The Commission is committed to fulfilling the requirements of Section 18 and, during the OIG's review, continued to publish and make available significant economic, educational and informational materials for the public as directed by Section 18. During the OIG review, the Commission also established a review process to clear academic papers for publication, pursuant to which eleven papers have been fully cleared and another nine are currently under agency review.

On February 21, 2014, the OIG issued a Final Report on its review of issues arising in the research program in the Office of the Chief Economist (OCE). On February 24, 2014, the OIG provided the Commission with proposed redactions, and the agency initiated a review of the proposed redactions for compliance with the provisions of the Privacy Act of 1974, 5 U.S.C. §552a. On March 21, 2014, after the redaction review was completed, the OIG's report was posted on the Commission's website.

Mr. Aderholt: Can you tell me when the Inspector General review will be made available? Will the report be redacted at all? If it will be redacted, please explain why. Please provide a copy of the report for the record.

Response: The Inspector General's "Review of the Commodity Futures Trading Commission's Response to Allegations Pertaining to the Office of the Chief Economist" was made available to the general public on the Commission's website on March 21, 2014. The report is subject to the provisions of the Privacy Act of 1974, 5 U.S.C. §552a, and was reviewed and redacted consistent with the requirements of the Act. The redactions were determined by the Commission and not the Office of the Inspector General. A copy of the report is attached as *Appendix 002*.

PURCHASE CARDS

Mr. Aderholt: Please provide all purchase card account monthly statements for April 2013 to January 2014.

Response: The requested purchase card monthly statements are attached as *Appendix 003*.

DATA SECURITY AND INFORMATION TECHNOLOGY BUDGET

Mr. Aderholt: Another core function that CFTC has had issues with is data security. This is essential not only for CFTC employees but industry participants. With the substantial increase in information required to be reported to the agency under Dodd-Frank, CFTC must keep proprietary information secure. This information has the ability to move markets and make entire entities go under, especially at private firms. There is a redacted audit report from the CFTC that highlighted flaws in CFTC's data security ability. There are also reports that data servers at CFTC have failed recently. Please explain why the audit report was redacted. If a confidential response needs to be provided, please inform the Subcommittee and indicate as such in the response.

Response: Specific information about the state of automated controls over writing of data to non-CFTC external devices (i.e., usb thumb drives) was redacted due to security concerns. The CFTC has implemented automated controls over writing of data to non-CFTC external devices in the Chicago, New York, and Kansas City regional offices and will be extending those controls CFTC-wide in the very near future.

Mr. Aderholt: Please provide information on any failing servers at the CFTC and their cost for replacement.

Response: The Commission does not have servers that are failing or have failed recently.

Mr. Aderholt: The recently passed Omnibus set-aside \$30 million dollars for Information Technology and allowed up to \$10 million to be transferred to Salaries and Expenses accounts. Will this transfer take place? How much is CFTC planning to transfer?

Response: CFTC does not plan to transfer any of the \$35 million provided for Information Technology in FY 2014.

Mr. Aderholt: What measures does CFTC plan to put in place to ensure data breaches do not occur? Does CFTC have any efforts or initiatives underway to bolster data security? How much does CFTC spend on data security currently?

Response: In FY 2014, the CFTC will spend \$2.2 million on data security hardware, software, and services. The Commission complies with FISMA and is in the process of automating the Consensus Audit Guidelines (CAG) 20 Critical Controls and transitioning to Continuous Diagnostics and Monitoring (CDM) as mandated by the Department of Homeland Security. The automation of one of those controls, data loss prevention (DLP), is currently in the acquisition phase.

LEASING COSTS

Mr. Aderholt: CFTC spends 50% more now than it did in 2010 on office space, yet has about the same number of people. That's \$5 million a year wasted on empty space. For example, CFTC's Kansas office only has 30 percent capacity filled. That \$5 million dollars would have been enough to cover the budgetary shortfall that supposedly led to furloughs at the agency last year. Does CFTC have any plans to renegotiate leases that would reduce the size of its footprint? Could CFTC sublet any space to reduce leasing costs?

Response: In 2009 and 2010, a number of issues were developing that affected staffing and consequently leased space. First, in 2009, CFTC had leasing costs of approximately \$13 million and an FTE count of 498 staff with 107 contractors. This is the first year CFTC was able to begin staffing up for pre Dodd-Frank mission related work. Second, CFTC space was very tight with some staff doubled up in single offices, professional staff occupying support staff space, libraries, and other inappropriate space. Third, there was a growing need for improved security, hearing and deposition room capacity, and IT/video communication enhancement. Fourth, the leases for all CFTC offices were expiring over the following 2 to 4 years, a time when the office space markets were generally very favorable. Lastly, in 2010 and 2011 there was an expectation that significant staff expansion would occur following the passage of the Dodd-Frank Act, which greatly expanded CFTC's responsibilities.

This increase from FY 2009 to FY 2014 is primarily due to two factors - increase in space and inherent increases in rent (taxes, utilities, inflation). The increases in CFTC's space occurred during FY 2011 and FY 2012. In FY 2014, CFTC workers have increased to approximately 676 FTEs and 295 contractors. This is a 60% increase of 366 new bodies to seat in addition to addressing the overcrowding and need for security, hearing and deposition room and IT space.

CFTC continues to believe additional staff is needed to fulfill its mandated mission. It is anticipated that all leased space will be fully occupied if the CFTC receives the FY 2015 President's Budget Request. On the subleasing issue, CFTC has received a legal opinion indicating that it has extremely

limited ability to sublease space and that any return of space to the landlord would have to be done by mutual agreement. If CFTC were able to sublease space, it would not be able to retain lease payments and would be required to deposit them to the Treasury as miscellaneous receipts, thereby providing no financial relief to the agency.

Mr. Aderholt: Please provide CFTC's planned use for Tenant Improvement Allowance of approximately \$6 million available October 1st, 2014 under 2 scenarios: 1. If CFTC's budget for FY 2015 remains the same. 2. If Congress fully funds the FY 2015 Budget Request.

Response: The Second Refurbishment Credit, as it is called in our current lease, will be available to CFTC on October 1, 2015, the first day of FY 2016, and will have no effect on CFTC's FY 2015 budget execution under either scenario. The terms of the lease mandate that the credit be used to offset total rent next due.

LAWSUITS

Mr. Aderholt: Please provide a list of all legal challenges CFTC has faced or is facing because of its rulemakings since FY 2009. Provide the rule reference, the legal citation for the rule's authority, the provisions of the rule or legal authority being challenged, a summary of the complaints of each challenge and the current status of the legal challenge.

Response: Commission rules have been challenged in six separate lawsuits, four of which have been concluded. The Commission prevailed in two, lost one, and a fourth was withdrawn by the plaintiff. Two suits remain pending.

International Swaps & Derivatives Ass'n, et al. v. CFTC. The International Swaps and Derivatives Association ("ISDA") and the Securities Industry Financial Markets Association ("SIFMA") challenged the Commission's rule imposing speculative position limits on physical commodity derivatives, published in the Federal Register on November 18, 2011, 76 Fed. Reg. 71626, and codified in the Code of Federal Regulations at 17 C.F.R. §151.1, et seq. ("Position Limits Rule"). The Commission promulgated the Position Limits Rule pursuant to Section 4a of the Commodity Exchange Act, 7 U.S.C. § 6a, as amended by section 737 of the Dodd-Frank Act.

The "heart of the Plaintiffs' challenge" to the Position Limits Rule was their contention "that the CFTC misinterpreted authority under the Commodity Exchange Act of 1936 (CEA)." *ISDA v. CFTC*, 887 F. Supp. 2d 259, 260 (D.D.C. 2012). The Commission determined that 7 U.S.C. § 6a contains a mandate that the CFTC enact position limits, so as to diminish eliminate or prevent excessive speculation. The Plaintiffs argued that the statute requires the Commission, before establishing limits, make an antecedent determination that limits are necessary. The Plaintiffs also challenged the Commission's consideration of costs and benefits, many specific policy choices relating to the levels of the limits, the choice of which derivatives would first be subject to limits, the inclusion of swaps in the limits, among others. Finally, the plaintiffs alleged that the Commission violated the Administrative Procedure Act by acting arbitrarily and failing to give interested persons sufficient notice of the rulemaking.

On cross-motions for summary judgment, the U.S. District Court for the District of Columbia rejected both parties' positions on whether limits are mandatory or must be justified by a necessity finding, holding that section 4a is "ambiguous as to . . . whether the CFTC is required to find that position limits are necessary and appropriate prior to imposing them." *ISDA*, 887 F. Supp. 2d at 267. Because the Commission had construed the statute as unambiguously requiring position limits, the court vacated the Position Limits Rule and remanded it to the Commission to consider the ambiguity the court perceived. *Id.* at 268, 281-82. The Commission appealed this decision to the U.S. Court of Appeals for the D.C. Circuit, but later withdrew the appeal after proposing a revised position-limits rule, see *Position Limits for Derivatives*, 78 Fed. Reg. 75680 (proposed Dec. 12, 2013), which addresses the District Court's concerns.

Investment Company Institute, et al. v. CFTC. The Investment Company Institute ("ICI") and the U.S. Chamber of Commerce challenged amendments to two CFTC regulations, 17 C.F.R. §§ 4.5, 4.27, that require certain "commodity pool operators" to register and provide the Commission with certain data related to systemic risks. See *Commodity Pool Operators & Commodity Trading Advisors: Compliance Obligations*, 77 Fed. Reg. 17,328 (Mar. 26, 2012) ("CPO Registration Rule").¹ In particular, the rule amendments at issue significantly narrowed an exclusion from the definition of "commodity pool operator" that was applicable to entities registered with the SEC as investment companies. The gravamen of the Plaintiffs' complaint was that the CFTC gave no good reason (and was therefore arbitrary and capricious) in narrowing the exclusion, and failed to consider properly the costs and benefits of doing so. They also challenged a number of the rule's particulars. *Inv. Co. Inst. v. CFTC*, 891 F. Supp. 2d 167 (D.D.C. 2013).

The court rejected the Plaintiffs' challenges and upheld the rule in its entirety. The court held that the CPO Registration Rule is a rational component of the CFTC's expanded mandate to oversee and regulate the previously dark swaps markets, is "moored to the purposes and concerns of Dodd Frank," and is "well within the agency's discretion." *Inv. Co. Inst.*, 891 F. Supp. 2d at 207-08. The court also concluded that the Commission's analysis satisfied the cost-benefit requirements of 7 U.S.C. § 19(a). The court held that the Commission "adequately identified, considered and evaluated the costs and benefits of [the CPO Registration Rule] with respect to the five factors set out in" 7 U.S.C. § 19(a). *Id.* at 219.

Plaintiffs appealed, but the U.S. Court of Appeals for the D.C. Circuit affirmed, agreeing with the District Court that the CFTC's rules were rational and adequately justified as a whole and in their particulars, and that the "CFTC's consideration and evaluation of [the CPO Registration Rule's] costs and benefit was not arbitrary or capricious." *Inv. Co. Inst. v. CFTC*, 720 F.3d 370, 376-77, 380-81 (D.C. Cir. 2013).

Chicago Mercantile Exchange, Inc. v. CFTC. The Chicago Mercantile Exchange ("CME") sought an injunction of the Commission's Swap Recordkeeping and

¹ The regulation was initially published at 77 Fed. Reg. 11252 (Feb. 24, 2012), but that release contained several errors that were subsequently corrected in the revised publication.

Reporting Requirements Rule, 77 Fed. Reg. 2136 (Jan. 12, 2012), codified at 17 C.F.R. part 45 ("Swap Reporting Rule"), enacted pursuant to 7 U.S.C. §§ 6r, 7, 7a-1, 7b-3, 12a and 24. CME alleged that the Commission exceeded the authorities provided by these statutes to require various kinds of reporting and failed to consider properly the costs and benefits of the rule. CME also alleged that certain staff guidance issued subsequent to the Swap Reporting Rule ("Staff FAQs") effected a substantive change to the rule, but failed to follow the procedures required by the APA, in particular notice and comment. CME voluntarily dismissed its lawsuit without prejudice pursuant to Federal Rule of Civil Procedure 41(a)(1) before the Commission filed an answer.

DTCC Data Repository (U.S.) LLC, et al. v. CFTC. Subsequent to CME dropping its suit, the Commission formally approved CME Rule 1001, a CME rule that requires all swaps cleared on CME's DCO to submit the data to a CME-affiliated SDR. Later, another DCO, ICE Clear Credit, issued a similar rule without formal CFTC approval, via a different procedure known as "self-certification." See 7 U.S.C. § 7a-2(c). DTCC argued that by approving the CME rule and allowing the ICE rule to take effect, the CFTC impermissibly changed Part 45 without following proper procedures, including consideration of costs and benefits under 7 U.S.C. § 19(a). When these underlying events were taking place, CFTC staff withdrew the Staff FAQ that were at issue in the CME case. DTCC challenged that withdrawal, arguing that it effected a substantive rule change without observance of proper procedures.

The CFTC moved to dismiss 4 of the 5 counts in the Complaint—all except the direct challenge to CME Rule 1001. The U.S. District Court for the District of Columbia dismissed 3 of the 5. The court held that the challenge to the ICE Clear Credit rule was not a reviewable final agency action, because the ICE rule was established through self-certification, not Commission approval. *DTCC v. CFTC*, 13-cv-624 slip op. at 12-14 (D.D.C. Mar. 10, 2014). The court also held that judicial review was not available for DTCC's claim that Commission staff acted arbitrarily in withdrawing the Staff FAQs regarding the reporting of cleared swaps, because this also was not final agency action. *Id.* at 7-9. The CFTC had moved to dismiss a 4th count on the grounds that it was duplicative of the 5th (both challenges to CME Rule 1001), but the court held that it was not precisely duplicative.

Litigation as to the 2 remaining counts is ongoing; the parties are scheduled to brief cross motions for summary judgment in the coming months.

Bloomberg LP v. CFTC. Bloomberg LP challenged a provision of Commission Rule 39.13, 17 C.F.R. § 39.13, which establishes requirements for certain assumptions a DCO must use in establishing collateral requirements for futures and swaps. See *Derivatives Clearing Organizational General Provisions and Core Principles*, 76 Fed. Reg. 69334 (Nov. 8, 2011) ("Liquidation Rule"). The Liquidation Rule was promulgated pursuant to 7 U.S.C. § 7a-1(c)(2)(D). Bloomberg, planning to establish a swap-execution facility, alleged that the Liquidation Rule arbitrarily required different assumptions (regarding anticipated time to liquidate) for financial swaps and futures in calculating the required margin collateral, disadvantaging swaps and, therefore, swap-execution facilities. Bloomberg alleged that the Liquidation Rule's discussion of costs and benefits was inadequate and violated the CEA cost-benefit provision, 7 U.S.C. § 19(a). Bloomberg also claimed that the Commission failed to give interested parties fair notice of various portions of the Liquidation Rule. *Bloomberg LP v. CFTC*, 949 F. Supp.

2d 91, 113 (D.D.C. 2013). The court dismissed Bloomberg's lawsuit because it concluded that Bloomberg was not harmed directly. *Id.* at 123-24. Bloomberg did not appeal.

SIFMA, et al v. CFTC. On December 4, 2013, SIFMA, ISDA, and the Institute of International Bankers filed a complaint in the U.S. District Court for the District of Columbia alleging that (1) that the Commission's July 2013 cross-border guidance, *Interpretive Guidance and Policy Statement regarding Compliance with Certain Swaps Regulations*, 78 Fed. Reg. 45292 (July 26, 2013) ("Cross Border Guidance") is in fact a regulation, defectively promulgated because it lacks a cost-benefit analysis; (2) that the "rules" set out in the cross-border release exceed the Commission's authority under 7 U.S.C. § 2(i) to regulate conduct overseas to the extent that it has a "direct and significant connection with activities in, or effect on, commerce of the United States"; (3) that 14 Commission rules implementing Dodd-Frank Title VII are arbitrary and capricious and failed properly to consider costs and benefits because they did not specify or consider what overseas activity would be subject to the rules;⁴ and (4) in those 14 rules, the Commission failed to consider comments concerning their overseas application. The Plaintiffs ask the court to vacate the Cross-Border Guidance and enjoin the Commission from enforcing any of the 14 specified rules "extraterritorially." The parties are in the process of briefing cross-motions for summary judgment.

Mr. Aderholt: Please provide the actual cost to date and the projected cost of each legal challenge.

Response: The Commission currently does not track or project the costs of particular legal challenges.

SWAP DEALER DEMINIMIS

Mr. Aderholt: Please 1) quantify the number of swap dealers currently registered with the Commission; 2) list the aggregate gross notional amount of swap activity as of the date of the hearing per CFTC regulation 1.3(ggg)(4) for each registered swap dealer without individually identifiable information; 3) estimate the number of additional swap dealers that will register with the Commission if the de minimis threshold is reduced to \$3 billion; 4) list each registered swap dealer, without individually identifiable information, that is deemed a Systemically Important Financial Institution by the Financial Stability Oversight Commission and/or the

⁴ The fourteen rules are: the Swap registration Rule, 77 Fed. Reg. 2613, the Entity Definition Rule, 77 Fed. Reg. 30596, the Portfolio Reconciliation and Documentation Rule, 77 Fed. Reg. 55904, the Real-Time Reporting Rule, 77 Fed. Reg. 1182, the Daily Trading Records Rule, 77 Fed. Reg. 20128, the Trade Execution Rule, 78 Fed. Reg. 33606, the Straight Through Processing Rule, 77 Fed. Reg. 21278, the Clearing Determination Rule, 77 Fed. Reg. 74284, the Chief Compliance Officer Rule, 77 Fed. Reg. 20128, 20200-01, the Risk Management Rule, 77 Fed. Reg. 20128, 20205-11, the SDR Reporting Rule, 77 Fed. Reg. 2136, the Historical SDR Reporting Rule, 77 Fed. Reg. 35200, the Large Trader Reporting Rule, 76 Fed. Reg. 43581, and the SEF Registration Rule, 78 Fed. Reg. 33476.

Financial Stability Board; and 5) list the total revenue and assets of each registered swap dealer and corresponds with the data provided in criteria #2) and #3) of this question without individually identifiable information. If the CFTC does not have the information requested in criteria number 5, please obtain the information from the firms directly, through the National Futures Association, Designated Self-Regulatory Organizations that oversee the entities, or as a last resort via SEC form 10K, annual reports, and other publicly available data online. If the company is not public and CFTC does not have the legal authority to obtain this information, please explain the legal reasoning and justification in memoranda format.

Response: The information requested follows:

Number of CFTC-registered swap dealers.

- 102 as of March 27, 2014.

CFTC-registered swap dealers' swap gross notional amounts.

- Please see Appendix 004

Estimate the number of unregistered swap dealers that would be required to register if the *de minimis* threshold were reduced to \$3 billion.

- The Commission does not believe that the information needed to answer this question is available at this time. The Commission expects that such information will become available over a period of time through reporting to swap data repositories and has provided in its regulations a period of up to five years to collect and study the data before the \$3 billion *de minimis* would become effective.

List of CFTC-registered swap dealers that are deemed Systemically Important Financial Institutions by FSOC and the Financial Stability Board.

The list of swap dealers deemed to be SIFIs by FSOC was compiled by identifying those registered swap dealers that are non-bank financial companies subject to the Fed's oversight pursuant to an FSOC designation under Dodd-Frank Act (DFA) section 113 ("FSOC-designated entities"); bank holding companies with more than \$50 billion in consolidated assets and subject to enhanced prudential requirements under DFA section 165; and former bank holding companies that received TARP funding and are treated as FSOC-designated entities under DFA section 117. For the purpose of identifying SIFIs, bank holding companies that have submitted resolution plans pursuant to section 165(d) through December 31, 2013 are treated as being subject to enhanced prudential requirements and therefore being SIFIs.

The list of swap dealers deemed to be global systemically important banks was compiled by looking at the November 11, 2013 list published by the Financial Stability Board.

	Swap Dealers Deemed SIFIs by FSOC	Swap Dealers Deemed Global Systemically Important Banks by the Financial Stability Board
1	AUSTRALIA AND NEW ZEALAND BANKING GROUP LTD	
2	BANCO BILBAO VIZCAYA ARGENTARIA SA	X

	Swap Dealers Deemed SIFIs by FSOC	Swap Dealers Deemed Global Systemically Important Banks by the Financial Stability Board
3	BANCO SANTANDER SA	X
4	BANK OF MONTREAL	
5	BANK OF NOVA SCOTIA THE	
6	BNP PARIBAS	X
7	CANADIAN IMPERIAL BANK OF COMMERCE	
8	COMMERZBANK AG	
9	COMMONWEALTH BANK OF AUSTRALIA	
10	DEUTSCHE BANK AG	X
11	NATIONAL AUSTRALIA BANK LIMITED	
12	ROYAL BANK OF CANADA	
13	SOCIETE GENERALE S A	X
14	TORONTO DOMINION BANK THE	
15	UBS AG	X
16	SKANDINAVISKA ENSKILDA BANKEN AB PUBL	
17		BANK OF AMERICA NA ⁵
18		BANK OF NEW YORK MELLON

Swap Dealers' Total Revenue and Assets.

- The details of swap dealers' total revenue and assets have not yet been determined.

LEGISLATIVE PROPOSAL FOR USER FEES

Mr. Aderholt: The President's fiscal year 2015 budget request discusses a legislative proposal to collect user fees to fund the Commission's financial regulation activities. What is the current status of that legislative proposal?

Response: CFTC understands that a legislative proposal on user fees is presently being drafted. The CFTC is prepared to provide technical assistance, where appropriate, for any such proposal.

Mr. Aderholt: When does the Administration plan on submitting the legislation to the Congress?

Response: The President's Budget contemplates submitting the legislation by the end of FY 2014.

Mr. Aderholt: When would the legislation have to be enacted for the collections to be in place in order to collect the fees?

⁵ Bank of America NA was included in the above list of Global Systemically Important Banks. However, note that the Financial Stability Board's list includes Bank of America, which could mean either Bank of America NA or Bank of America Corporation. The former is a registered swap dealer, the latter is not.

Response: The details of the implementation timeline have not yet been determined.

Mr. Aderholt: What would the fee be based on, who would have to pay the fee and how much would the fee be?

Response: The details of the fee structure have not yet been determined.

CLEARINGHOUSES

Mr. Aderholt: Has or does CFTC plan to propose rules related to designated SIFI clearinghouses or DCOs similar to what the SEC has done? Will these rules include minimum capital requirements and operating expenses requirements?

Response: In November of 2013, the CFTC finalized rules for SIDCOs. These rules, together with the existing derivatives clearing organizations rules, establish Commission regulations that are consistent with the Principles for Financial Market Infrastructures (PFMIs) promulgated by the Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissions (CPSS-IOSCO). Consistency with the PFMIs follows the mandate of Section 805(a)(1) that risk management standards "take[] into consideration relevant international standards." In addition, the rules would allow SIDCOs to continue to be Qualifying Central Counterparties for purposes of international bank capital standards.⁶ As such, these final rules were intended to address all of the remaining gaps between part 39 of the Commission's regulations and the PFMIs. The final rules include substantive requirements relating to governance, financial resources, system safeguards, special default rules and procedures for uncovered losses or shortfalls, risk management, additional disclosure requirements, efficiency, and recovery and wind-down procedures. The financial resources rules include requirements for minimum levels of resources to meet member defaults⁷ as well as a minimum level of resources

⁶ A Qualifying Central Counterparty is defined by the Basel Committee for Banking Supervision as, in relevant part, a central counterparty that is prudentially supervised in a jurisdiction where the relevant regulator has established and publicly indicated that it applies to the central counterparty, on an ongoing basis, domestic rules and regulations that are consistent with the PFMIs. International bank capital standards provide incentives for banks, including their subsidiaries and affiliates, to clear derivatives through Qualifying Central Counterparties by setting lower capital charges for exposures to a Qualifying Central Counterparty.

⁷ The SIDCO must maintain financial resources sufficient to meet its financial obligations to its clearing members notwithstanding a default by the one, or in certain cases two, clearing member(s) creating the largest combined loss to the SIDCO in extreme but plausible market conditions.

available to fund operations in the event the SIDCO were to need to implement its recovery or wind-down plan.³

In addition, because of the potential advantages afforded to Qualifying Central Counterparties, the CFTC included procedures by which DCOs other than SIDCOs may elect to become subject to these additional standards so that they may also be considered to be Qualifying Central Counterparties.

Mr. Aderholt: Please describe all rules, guidance, roundtables, or any other actions taken regarding designated SIFI Clearinghouses or DCOs.

Response: In 2010 the CFTC proposed heightened requirements to increase the minimum financial resources requirements for SIDCOs, restrict the use of assessments in meeting such obligations, enhance the system safeguards for SIDCOs, and grant the CFTC special enforcement authority over SIDCOs pursuant to section 807 of the Dodd-Frank Act. The CFTC requested and received public comment on these proposals. However, the CFTC elected to delay finalization of these regulations because (1) efforts to finalize the PFMIs were ongoing and new rules could have put SIDCOs at a competitive disadvantage vis-à-vis foreign central counterparties not yet subject to comparable rules, and, (2) at the time, no DCO had been designated as systemically important by the Financial Stability Oversight Council. The CFTC finalized these proposed regulations in 2013 following significant domestic and international developments. For example, (1) final PFMIs were published in April of 2012; (2) the Financial Stability Oversight Council designated two registered DCOs for which the CFTC is the Supervisory Agency as systemically important, and (3) the Basel CCP Capital Requirements, which provide for significantly less favorable capital treatment for bank exposures to central counterparties unless the relevant regulator of the central counterparty establishes regulations that are consistent with the PFMIs by the end of 2013, were adopted. CFTC staff was significantly involved in each of these developments and, with respect to the international developments, staff used its expertise to help promote the goal of keeping clearing cost-effective and to develop global standards that are consistent with U.S. law.

In addition, the CFTC previously reviewed the risk management standards set forth in the CFTC's regulations to identify those areas in which additional risk management standards for SIDCOs would be appropriate. As part of this review, and consistent with section 805 of the Dodd-Frank Act, which directs the CFTC to consider relevant international standards and existing prudential requirements when prescribing risk management standards governing the operations related to payment, clearing, and settlement activities for SIDCOs, the CFTC realized that there were gaps between CFTC regulations and the PFMIs. As such, the CFTC proposed and finalized rules for SIDCOs to address these regulatory gaps.

³ In November of 2011 the CFTC finalized rules applicable to all DCOs, which included a rule requiring a DCO to cover its operating costs for a period one year, as calculated on a rolling basis. The SIDCO rules require a SIDCO to maintain sufficient unencumbered liquid financial assets, funded by the equity of its owners, to implement its recovery or wind-down plans.

As part of the rulemakings described above, the CFTC solicited public comment, met with market participants, and reviewed and considered public comment letters. In addition, the CFTC consulted with both domestic agencies, including the Financial Stability Oversight Council, as well as other international authorities. Moreover, as mentioned above, CFTC staff participates extensively in several international and domestic working groups to advance the agency's goals and promote a harmonized approach to the regulation and supervision of SIDCOs. For example, CFTC staff was actively involved in the CPSS-IOSCO working group that promulgated the PFMIs, as well as in the working group that promulgated the Basel CCP Capital Requirements. In addition, a significant amount of CFTC staff time was spent, and continues to be spent, on work for the Financial Stability Oversight Council.

Mr. Aderholt: Please provide a table with the status of all proposed and final regulations since 2009.

Response: Please see *Appendix 005*.

From: Thompson, Anthony C.
To: * All CFTC (FTE)
Subject: 2013 Sequestration Update
Date: Friday, December 21, 2012 1:57:25 PM

OED COMMUNICATION

To: All Employees
From: Anthony Thompson, Executive Director
Subject: Implications of Ongoing Budget Negotiations

The purpose of this email is to let you know the impact of a potential sequestration on CFTC.

The Administration continues to work with Congress to resolve impending Federal budget events that are scheduled to occur around the end of the year, commonly referred to as the “fiscal cliff.” Among these are potential across-the-board reductions in Federal spending, also known as “sequestration.” Under the Budget Control Act of 2011, these reductions are scheduled to take effect on January 2, 2013.

If sequestration occurs, it will reduce CFTC’s budgetary resources for the rest of the fiscal year (through September 30). These cuts, while significant and harmful to our mission, would not require immediate reductions in spending; we will have funds available after January 2, but our overall funding for the remainder of the year would be reduced.

If sequestration occurs, our day-to-day operations will not change dramatically on or immediately after January 2. If we must operate under reduced funding levels for an extended period of time, we may have to consider cost reducing actions in the future. In that event, we will carefully consider available options to reduce costs within the agency consistent with our obligation to execute our core mission.

If you have questions about the potential sequestration, I encourage you to contact Mark Carney, Kitty McCoy, Stacy Yochum, or me. We will do our best to provide clear information about the status of events as they unfold.

Finally, let me express my gratitude during this holiday season for your hard work and dedication to the vital mission of CFTC. Your contributions touch people’s lives in many significant ways, and I want you to know how deeply appreciative everyone is of your efforts.

Tony

Anthony C. Thompson
Executive Director
Office of the Executive Director, Commodity Futures Trading Commission
1155 21st Street, NW | Washington DC 20581 | Tel: 202.418.5697

From: [Thompson, Anthony C.](#)
To: [All CFTC \(FTE\)](#)
Subject: FY2014 Budget Forecast -Staff Update
Date: Thursday, October 24, 2013 9:32:25 AM

Dear Colleagues:

I wanted to follow-up on the information provided by the Chairman in his email earlier today.

As the Chairman explained, we have made numerous budget cuts in order to save money in an attempt to minimize the potential adverse impact on staff. Unfortunately, we are still facing serious financial restraints and must begin the process of proposing up to 14 days of discontinuous furlough.

This means that the furlough days will be spread out over the course of the FY and will not be served all at one time, which we hope helps to minimize the financial impact on employees. At this time, we anticipate that up to three (3) furlough days will be needed during the period of the CR (ending January 15, 2014), with the additional furlough days occurring during the remainder of the fiscal year. We will continue to monitor our financial situation closely and will keep you apprised of whether furlough days will be taken as scheduled.

We want each of you to know that all of the work you perform here at the CFTC is important. Therefore, we have decided that furloughs will be implemented equitably. This means that every employee subject to furlough, regardless of position, will be furloughed the same amount of days/hours with the number of hours prorated for part time staff. Although there are some positions and offices that are not subject to furlough, such as the presidential appointees, the Whistleblower office, and the Office of Consumer Outreach, this is due to the nature of their funding and not a reflection that your roles are less vital to CFTC or to the American people.

Each of you will be receiving your official notice of the proposed furlough from your supervisors starting today. Please make sure to read the letter carefully and acknowledge its receipt as instructed. Remember that this does not mean that you will begin serving your furlough days once you receive the notice. You will have an opportunity to respond and will receive a written decision before taking any furlough days.

Most importantly, we understand that the furlough could impose hardships on many of you. We will continue to work closely with all employees to do our best to support and provide you with up-to-date communication throughout this coming year. We truly appreciate everyone's ongoing cooperation and patience throughout this process and thank you for your work and dedication to accomplishing the mission of CFTC.

HRB will be sending an OED communication to all staff today with information about the process and Questions and Answers for your consideration. A separate email with instructions to supervisors on issuing the proposals will follow.

We will continue to keep you updated on any changes in our budget situation, to include sharing any new developments on our funding status, as soon as additional details become available.

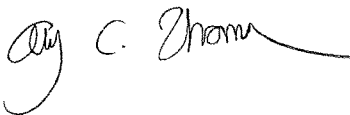
Tony


U.S. COMMODITY FUTURES TRADING COMMISSION

Three Lafayette Centre
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Office of the
Executive Director

TO: Mark Weatherly
Deputy Associate Director for Housing, Treasury, and Commerce
Office of Management and Budget

FROM: Anthony Thompson
Executive Director 

DATE: January 2, 2014

SUBJECT: Request for Exception Apportionment Due to Extraordinary
Circumstances

The Commodity Futures Trading Commission (CFTC) hereby requests an exception apportionment of \$2.932 million above the amount automatically apportioned for the CFTC under the Continuing Appropriations Act, 2014 (P.L. 113-46). We make this request pursuant to the authority in Section 112 of the Continuing Appropriations Act, 2014, which provides that:

Amounts made available under section 101 for civilian personnel compensation and benefits in each department and agency may be apportioned up to the rate for operations necessary to avoid furloughs within such department or agency, consistent with the applicable appropriations Act for fiscal year 2013, except that such authority provided under this section shall not be used until after the department or agency has taken all necessary actions to reduce or defer non-personnel-related administrative expenses.

This request is being submitted in an abundance of caution at this time due to a recently opened inquiry by the U.S. Government Accountability Office (GAO) into the availability of CFTC's transfer authority under the Continuing Appropriations Act, 2014.¹ While the CFTC believes that the agency retained transfer authority under the Continuing Appropriations Act, 2014, we are requesting that the exception apportionment be granted prior to January 7, 2014, in order to mitigate potential staff furloughs which may be required if GAO determines that the CFTC does not retain transfer authority under the Continuing Appropriations Act, 2014.

¹ On December 20, 2013, CFTC was formally notified that GAO received a congressional request for a legal opinion regarding whether transfer authority provided to CFTC in the Financial Services and General Government Appropriations Act, 2012, continues to be available to CFTC as it operates under the Continuing Appropriations Act, 2014.

CFTC carefully considered, but did not request, an exception apportionment under the Continuing Appropriations Act, 2014 earlier in FY 2014. In planning for FY 2014, CFTC determined that absent a budget increase the agency would likely need to furlough staff as a result of the impact of sequestration and a decrease in available carryover funds. At the end of FY 2013, the agency engaged in consultations with employee unions on the proposed furlough and on October 24, 2013 notified all staff that they may be furloughed not more than 14 days in FY 2014. CFTC informed staff that up to three furlough days would need to be served before January 15, 2014, and ultimately staff were required to serve two furlough days during this period. CFTC implemented two furlough days, instead of requesting an exception apportionment, to avoid putting the agency in undesirable financial position for the remainder of the fiscal year with the possibility of additional sequestration budget reductions. The availability of transfer authority under the Continuing Appropriations Act, 2014 also factored into the agency's decision not request an exception apportionment. The agency also did not think it prudent to compress furlough days to fewer pay periods later in FY 2014 given the financial impact on employees, and did not wish to presume a budget increase which would offset any exception apportionment received under the Continuing Appropriations Act, 2014. However, the current inquiry into the CFTC's transfer authority raises the possibility of an agency-wide furlough of all staff for the period of January 7, 2014 through January 15, 2014, in addition to the 14 days of furlough previously noticed and has the potential to jeopardize the CFTC's ability to perform mission critical oversight, surveillance and regulation. Therefore, under the present circumstances, the CFTC believes it prudent and appropriate to request an exception apportionment.

On November 26, 2013, CFTC transferred \$2.932m from the Information Technology (IT) account to the Salaries and Expenses (S&E) account in order to continue the necessary and orderly operations of the CFTC, to minimize employee furloughs, and to avoid reductions-in-force during FY 2014. Even with the completed transfer of \$2.932m and exhaustive use of carryover balances, CFTC S&E resources under the Continuing Appropriations Act, 2014 are extremely constrained and the agency has taken all necessary and available actions to reduce or defer non-personnel related administrative expenses. For example, CFTC has deferred procurements, reduced lease costs, and significantly reduced staff travel and training as well as contractor support, funded by the S&E account. To reduce personnel costs, CFTC has already implemented agency-wide furloughs for two days, continued to severely restrict external hiring, and minimized usage of compensatory time, overtime, and holiday premium pay.

Based on current projections, CFTC will begin to obligate the transferred funds on January 7, 2014, for staff salaries and benefits. The requested exception apportionment would allow CFTC to continue ongoing operations without additional staff furloughs and without obligating or expending any of the \$2.932m transferred under the Continuing Appropriations Act, 2014 and currently under review by GAO. Without the exception apportionment CFTC may need to consider agency-wide furloughs of all staff for the period of January 7, 2014 through January 15, 2014, which we view as a very undesirable option that will jeopardize the CFTC's ability to continue the necessary and orderly operations of the agency.

In addition, it appears that CFTC may receive a full-year FY 2014 appropriation on or about January 15, 2014. The requested exception apportionment provides time for the GAO decision and the FY 2014 full-year appropriation to be resolved without additional staff furloughs.

In summary, we are requesting an exception apportionment in order to avoid uncertainty about additional unanticipated agency-wide furloughs and as a prudent and necessary step to ensure continuity of CFTC operations. Due to the extraordinary circumstances and the GAO inquiry into the availability of transfer authority under the Continuing Appropriations Act, 2014, the CFTC respectfully requests that OMB approve an exception apportionment prior to January 7, 2014.



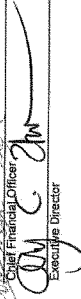
Thank you for your consideration of, and assistance with this request. If you have any questions regarding this request, I would be pleased to discuss them with you.

SF 132 APPORTIONMENT AND REAPPORTIONMENT SCHEDULE

FY 2014 Apportionment
Funds provided by Public Law 113-46

Treasury Agency	FY1	FY2	Treasury Account	Line No	Line Split	Bureau/ Account Title / Cat B Sub / Line Split	Previous Approved	FY14 Footnote	Agency Request	OMB Action	OMB Footnote	Memo Obligations
						Commodity Futures Trading Commission Account: Commodity Futures Trading Commission (338-00-1400) TAFS: 95-1400 2014/2015						
95	2014	2015	1400	ItemNo	2	Last Approved Apportionment: 2013-11-19						
95	2014	2015	1400	RepCat	NO	Reporting Categories						
95	2014	2015	1400	Adj/Aut	NO	Adjustment Authority provided						
95	2014	2015	1400			Budgetary resources						
95	2014	2015	1400	1100		BA: Disc. Appropriation	142,415,892		142,415,892	142,415,892		
95	2014	2015	1400	1121		BA: Disc. Appropriations transferred from other Accounts	2,932,000 A1		2,932,000	2,932,000		
95	2014	2015	1400	1134		BA: Appropriation Excluded from Obligation	-100,659,552		-97,727,552	-97,727,552		
95	2014	2015	1400	1150		BA: Disc. Spending auth./Attic coils, reimb, other	250,000		250,000	250,000		
95	2014	2015	1400	1820		Total budgetary resources avail (disc. and maind)	44,538,340		47,870,340	47,870,340		
95	2014	2015	1400			Application of Budgetary Resources						
95	2014	2015	1400	6001		Category A - 1st Quarter						
95	2014	2015	1400	6002		Category A - 2nd Quarter						
95	2014	2015	1400	6003		Category A - 3rd Quarter						
95	2014	2015	1400	6004		Category A - 4th Quarter						
95	2014	2015	1400	6011		Category B - Salaries & Expenses						
95	2014	2015	1400	6190		Total budgetary resources available	44,538,340 A1		47,870,340	47,870,340		

End of File

CFTC Approval:  Budget Officer Date 10/1/2014
 Chief Financial Officer Date 10/1/2014
 Executive Director Date 1/2/2014

FY 2014 Apportionment
Previously Approved Footnotes

Footnotes for Apportioned Amounts

A1 Of the \$44,938,340 apportioned, \$2,932,000 is contingent. Upon the completion of the regular notification procedures of the Committees on Appropriations pursuant to Sec. 730 of Public Law 112-55 that continues (as a term and condition) under Public Law 113-46.

95- 1400 2014 \ 2015

End of File

From: OED Communication
To: All CFTC (FTE)
Subject: OED COMMUNICATION: Administrative Furlough Decisions
Date: Thursday, November 14, 2013 12:37:52 PM

OED COMMUNICATION

SUBJECT: Administrative Furlough Decisions

By letter dated October 24, 2013, all employees were notified of a proposed discontinuous administrative furlough for up to 14 days between November 25, 2013 and September 30, 2014. All of the replies received in response to the proposal notice have been reviewed and carefully considered. Starting today you will be receiving a copy of the decision letter from your supervisor, which addresses concerns raised, outlines the basis for the decision, and provides information on any appeal rights you may have.

What are the scheduling parameters for full time employees?

- All full time employees who are subject to furlough are required to serve three 8-hour furlough days between the second week of pay period 23 and the end of pay period 26
- You will serve one 8-hour furlough day each pay period in 3 out of the 4 pay periods
- **Furlough days will not be limited to Mondays or Fridays;** you can take any scheduled workday as your furlough day, subject to supervisory approval
- All 8 hours must be served on a single day
- Employees may not all be able to take the same day
- If you are on a 5-4-9 schedule:
 - Continue to take one flex day per pay period
 - You may need to move your flex day due to furlough scheduling
 - You cannot schedule your furlough day on your flex day (you would need to move your flex day to another day)
 - Use the 8-hour day as the furlough day (moving the 8 hour day to the furlough day if necessary)
- Supervisors are encouraged to try and accommodate employee preference while still maintaining coverage
- Supervisors may not be able to grant your first choice due to the need to ensure office coverage
- If your regular recurring telework day is affected by the furlough, work with your supervisor to move it to another day during the pay period, if possible

What about part time employees?

- Part time employees will follow similar but not necessarily identical scheduling
- Part time employees are being provided separate guidance including the number of hours to be scheduled

How do I schedule my furlough day in pay periods 23-26?

- For **Pay Period 23**, the effective date (which determines the earliest date you can schedule your furlough day) is determined by the date you received the proposal and is stated in the decision letter you receive
 - If your effective date is November 25, 2013, (letters A, B, or C), can begin taking your furlough day on Monday, November 25th
 - If your effective date is November 29, 2013, (letters D, E, or F) you can begin

taking your furlough day on Friday, November 29th

1. If you are on a 5/4/9 schedule and your flex day is Friday, November 29th, you will need to move your flex day to a different day in pay period 23
 2. If you want to take a different day during the second week of pay period 23, please contact WorkforceRelations@cftc.gov as soon as possible
- **Pay Period 24:** You can take your 8-hour furlough day on any scheduled workday
 - **Pay Period 25:** You can take your 8-hour furlough day on any scheduled workday
 - **Pay Period 26:** You can take your 8-hour furlough day on any scheduled workday, unless you have already taken three 8-hour furlough days in the previous pay periods

What do I need to do?

- Discuss your schedule with your supervisor in advance to plan for pay periods 23-26
- Document your schedule so you know what days you are scheduled to be furloughed
- Look for an email next week with guidance on how to prepare for your furlough days

Who do I contact with questions?

- Email the [Workforce Relations](mailto:WorkforceRelations@cftc.gov) Mailbox



U.S. COMMODITY FUTURES TRADING COMMISSION

Three Lafayette Centre
1155 21st Street, NW, Washington, DC 20581
Telephone: (202) 418-5477
Facsimile: (202) 418-5529

Chief Financial Officer

MEMORANDUM

TO: Anthony C. Thompson, Executive Director

FROM: Mark Carney
Chief Financial Officer

Laurie Lindsay
Chief Human Capital Officer

DATE: October 23, 2013

SUBJECT: Necessity of Administrative Furloughs

Over the course of Fiscal Year (FY) 2013 and into FY 2014, the Commodity Futures Trading Commission has faced significant budget restraints. Despite implementing a number of actions to reduce our expenses expected in FY 2014, we have determined that it is necessary to furlough employees to avoid a deficiency and therefore promote the efficiency of the service.

Funding for FY 2013

CFTC began FY 2013 on a continuing resolution, which provided funding at slightly above FY2012 levels through March 27, 2013. This amount included \$55.0m specifically reserved for information technology (IT), of which \$10.0m could be transferred to salaries and expenses (S&E). The appropriation needed to cover increased salary and benefit expenses (such as those based on promotions or merit based pay adjustments under our performance management program) and other costs (such as increased lease costs or increased contractual costs due to inflation). The Financial Management Branch (FM) issued guidance to all staff to immediately restrict spending under the CR (see attachment 7), which included restrictions on hiring, bankcard purchases, travel, and a prohibition on starting new programs, projects, or activities.

On March 1, 2013, the President issued a sequester order required by the Budget Control Act of 2011, which cut 5% of the annual budget for FY 13 beginning March 1, 2013, and continuing through September 30, 2013. As a result, FM immediately implemented more restrictive measures to ensure that CFTC had sufficient financial resources to fund the agency through the remainder of the FY 2013. These restrictions continued through the remainder of the fiscal year. Through these measures, CFTC was able to avoid the need to furlough staff in FY 2013.

Overview of FY 2013 Spending Reductions

Based on our appropriated funding levels for FY 2013, including the amount required to be set aside for IT, an across-the-board reduction as well as a sequestration reduction, CFTC was faced with reduced budget levels available for S&E, which represents approximately 78% of CFTC's budget. See Attachment 1 Section A. In order to operate within this reduced budget level and avoid furloughs in FY 2013, the CFTC took a number of steps beginning Mar 4, 2013:

- Utilized authority to transfer funds from the IT to the S&E account. See Attachment 1 Section A.
- Curtailed hiring plans in order to reduce the FTE usage from 707 to 682. See Attachment 1 Section B.
- Reduced/avoided other operating costs, reduced scope or terminated existing contracts, and delayed planned procurements. See Attachment 1 Section B.
- Reduced travel and training budgets. See Attachment 1 Section B.
- Redirected FY 2012 carryover funds and prior year recoveries. See Attachment 1 Section B.
- Made efforts to minimize compensatory time, overtime, and holiday premium pay. See Attachments 4 and 5.
- Eliminated cash awards per OMB sequestration policy. See Attachment 6.

Funding for FY 2014

CFTC is beginning FY 2014 on a continuing resolution, which provided funding at FY 2013 levels through January 15, 2014. This amount includes \$55.0m specifically reserved for information technology (IT), of which \$10.0m could be transferred to salaries and expenses (S&E). The appropriation needs to cover increased expenses due to salary (such as those based on promotions or merit based pay adjustments under our performance management program) and other costs (such as increased lease costs or increased contractual costs due to inflation). CFTC anticipates a significant reduction of approximately \$5.0m in carryover and recovery funds compared to FY 2013. To address these budget reductions and cost increases, CFTC is taking a number of additional steps to further reduce spending in FY 2014.

Overview of FY 2014 Spending Reductions

The continuing resolution passed on October 16, 2013 flat funded CFTC through January 15, 2014. This funding level plus an increase in FY 2014 costs, combined with sequestration and significantly less in FY 2013 carryover and anticipated recovery funds leaves CFTC with a severely reduced budget level for FY 2014 S&E, which represents 78% of our budget. See Attachment 1 Section C. In light of management's duty to reduce spending, the CFTC has already implemented or is in the process of implementing the following actions to operate within this reduced budget level:

- Utilize authority to transfer funds from the IT to the S&E account. See Attachment 1 Section C.

- Reduce/avoid operating costs and delay planned procurements. See Attachment 2.
- Continue restricted hiring to reduce FTE costs/usage through attrition. See Attachment 3.
- Reduce travel budget below the FY 2013 level. See Attachment 1 Section D.
- Significantly reduce budgets for external training. See Attachment 1 Section D.
- Direct all FY 2013 carryover funds and prior year recoveries, if any. See Attachment 1 Section C.
- Continue to minimize compensatory time, overtime, and holiday premium pay. See Attachments 4 and 5.
- Continue following OMB sequestration policy to not pay discretionary incentive awards. See Attachment 6.

Conclusion

While significant cost-reduction efforts have been made to avoid furloughs, we are still short of necessary funds for FY 2014 S&E by approximately \$3.5m. The magnitude of the financial deficiency requires that reasonable actions be adopted such that all CFTC employees be furloughed to promote the efficiency of the service.

Course of Action

Unless additional savings can be found, the agency will most likely be forced to furlough employees to stay within the anticipated S&E budget. A "furlough" is putting an employee in temporary status without duties and pay because of lack of work or funds which is non-disciplinary in nature.

Furloughs are covered by 5 C.F.R. § 752, which outlines the process to be followed. All staff subject to furlough will receive a written proposal at least 30 calendar days prior to the effective date of any furloughs. This proposal will outline the basis for the action and their rights, including the right to reply orally and/or in writing, their right to review the material relied upon, and the right to representation. Once all replies are considered, employees will receive a final written decision which outlines the action to be taken and any appeal rights the employee may have.

If needed, the furloughs would be applied in a uniform and consistent manner such that every employee subject to furlough, regardless of position, will be furloughed the same amount of days/hours, with the number of hours prorated for part-time staff. No employees would be "excepted" from furlough. Please note that the presidential appointees, the Whistleblower office, and the Office of Consumer Outreach are not subject to furlough due to either the nature of their appointment or due to the nature of their funding.

We anticipate furlough days would be taken at a rate of no more than one 8-hour day per pay period, with furlough days taken on Mondays or Fridays. Employees would schedule their furlough days through their supervisors to allow supervisors to try to balance employee needs with office coverage and workload concerns. Employees would be told if any scheduled furlough days could be cancelled.

After considering the continuing resolution, our spending projections, and our payroll requirements, we estimate that no more than 14 days over the entire fiscal year including 3 days under a 107 day CR (thru January 15, 2014) would be necessary to close the shortfall in S&F for FY 2014.

Attachments:

- 1) FY 2014 CFTC Sequestration Operating Plan
- 2) CFTC Sequestration Hiring Plan
- 3) FY 2014 Agency Spending Reductions E-mail
- 4) Work on Holidays E-mail
- 5) Reminder of Compensatory Time Provisions
- 6) Office of Management and Budget Memorandum, *Agency Responsibilities for Implementation of Potential Joint Committee Sequestration*
- 7) OED Communication, Guidance for Operating Under Continuing Resolution in FY2013

ATTACHMENT I

FY 2014 CFTC Sequestration Operating Plan

A. Overview of FY 2013 Funding Reductions

1. Per the FY 2013 appropriation act (PL 113-6), CFTC received an appropriation of \$205,294,000. Of this amount, \$55,000,000 was set aside for IT, leaving \$150,294,000 for Salaries and Expenses. Following the appropriation, CFTC was subject to an additional 0.2% across-the-board reduction as well as a 5% sequestration reduction, resulting in a total budget of \$194,556,000, with \$52,140,000 reserved for IT expenses and \$142,416,000 available for Salaries and Expenses.
2. Section 744 of the Consolidated Appropriations Act of 2012 (P.L. 112-74) and section 730 of the Consolidated and Further Continuing Appropriations Act of 2012 (P.L. 112-55) authorized the CFTC to transfer up to \$10m of required minimum technology expenditures to other purposes. The CFTC used this authority to transfer \$10m from the IT to the S&E account.

Budget Authority (\$k)	S&E	IT	Total
Appropriation	150,294	55,000	205,294
Across-the-Board Reduction (0.2%)	(301)	(110)	(411)
5% Sequestration Reduction	(7,578)	(2,750)	(10,328)
Subtotal	142,416	52,140	194,556
Transfer Authority - IT to S&E	10,000	(10,000)	0
Apportionment	152,416	42,140	194,556

B. Actions Taken in FY 2013

1. In order to operate within these reduced FY 2013 budget levels the CFTC took the following actions beginning Mar 4, 2013:
2. Curtailed hiring plans in order to reduce the FTE usage from 707 to 682 and eliminated incentive awards, per OMB memorandum 13-05, for an estimated savings of \$4.6m.
3. Reduced/avoided other operating costs, reduced scope or terminated existing contracts, and delayed planned procurements sufficient to accomplish an estimated savings of \$2.3m.
4. Reduced agency-wide training budget from FY 2012 levels by 61% and achieve estimated savings of approximately \$0.2m.
5. Reduced travel budget by approximately 25% from FY 2012 levels for an estimated savings of approximately \$0.6m.
6. Redirected approximately \$5.2m in FY 2012 carryover funds and prior year recoveries toward FY 2013 ongoing operations.

ATTACHMENT 1

C. Overview of FY 2014 CR Funding Scenarios

1. Based on the most recently available draft CR language, CFTC would be funded in FY 2014 at the FY 2013 post-sequestration level of \$194,556,000 as shown above.
2. Even using the \$10m transfer authority described above, total S&E funding will still decrease by approximately \$7.6m from FY 2013 to FY 2014 because we will have only approximately \$1m carryover funds and less than \$800k to apply to S&E. In addition, other expenses will increase. FTE costs will increase by approximately \$1m in FY 2014 due to FY 2013 merit pay increases, anticipated increased health insurance premiums, and expanded health insurance coverage. Lease costs, which are also part of S&E, are scheduled to increase in FY 2014 by approximately \$2m.
3. If CFTC is not able to apply transfer authority, then S&E funding would fall by approximately \$17.6m from FY 2013 to FY 2014.

D. Anticipated FY 2014 Actions

1. In order to operate within these reduced budget levels the CFTC is taking or plans to take the following action:
 - a. Continue restricted hiring to reduce FTE costs/usage through attrition. Only critical positions will be filled from outside the agency and any hiring actions must be approved by the Chairman.
 - b. Reduce/avoid operating costs and delay planned procurements as much as legally and reasonable possible. This includes reducing non-IT contractors to the maximum extent possible while still supporting the agency's mission.
 - c. Reduce travel budget below the FY 2013 level.
 - d. Significantly reduce budgets for external training.
 - e. Direct all FY 2013 carryover funds and prior year recoveries, if any, toward FY 2014 requirements.
 - f. Continue to minimize compensatory time, overtime, and holiday premium pay by reminding staff to plan their work and travel only during regularly scheduled hours.
 - g. Continue OMB sequestration policy to not pay discretionary monetary awards into FY 2014 unless legally required to do so.

E. Conclusions

1. Even after taking significant cost reduction actions in FY 2013 and continuing to reduce costs in FY 2014, we are still short of necessary funding.
2. Unless additional savings can be found, the agency will most likely be forced to furlough employees to stay within the anticipated S&E budget. It is estimated that the number of days could be as great as 14 days over the entire fiscal year and 3 days under a 90 day CR (thru January 15, 2014).

ATTACHMENT 2

CFTC Sequestration Hiring Plan

Outlined below are the steps taken to address hiring under budget constraints:

- Effective 10/21/11, Divisions/offices were informed that hiring requests must have a business case that documents each request for recommendation to the Chairman for approval.
- At the end of FY 2012 (9/30/2012), CFTC ended the year with a head count of 703. The Spend Plan given to Congress was set at 707. At the end of FY 2013 (9/30/2013), CFTC ended the year with a headcount of 680.
- Effective 12/17/12, the Chairman delegated approval for hiring requests to OED Executive Director.
- Memo sent on 4/5/13 from Executive Director to all Division Directors providing the status of FY 2013 recruitment actions identifying number of commitments made, positions frozen and the number of actions being recruited.
- At the same time, Divisions were asked to prioritize their recruitment actions and further hiring was restricted.
- In April 2013, based on attrition projections and the requirement to reach 682 FTEs it was determined that only 12 recruitments could be advertised to candidates external to CFTC.
- Commitments and frozen positions were reviewed by the Executive Director on a weekly basis. In addition, weekly HR hiring meetings held with Executive Director to discuss pending Division internal/external business cases for approval.
- Email sent on 7/12/13 from Laurie Lindsay, CHCO to all Division Directors and Business Managers announcing that there will be no further *external hiring, other than those positions which were previously allocated and approved by the Chairman* through the end of this fiscal year (9/30/2013).
- In 7/12/13 email, further restrictions were put in place which required that vacant positions had to not only be filled with an internal candidate, but also required a business case which reflected that the position to be advertised was due to attrition and that there would be no gain in FTE's to the organization
- Effective 8/9/13, instituted a Hiring Request Business Case form to ensure that Divisions provided all the required information when submitting requests and ensure consistency across the CFTC

ATTACHMENT 3

From: Thompson, Anthony C.
Sent: Monday, September 30, 2013 9:32 AM
Subject: FY2014 Agency Spending Reductions

Dear Colleagues,

As you know we are operating during some very extraordinary times. Because a Continuing Resolution has not yet been enacted and signed into law, we are preparing for a potential shutdown of operations in the event of a lapse in appropriations. At the same time, we are also facing a significant budget shortfall in FY 2014, resulting from sequestration and other budget constraints. As the Chairman explained during the Town Hall meeting last week, we had the luxury of some 2012 carryover money that has enabled us to avoid furloughs in 2013, but unfortunately we do not have this carryover money for 2014, and we will be flat funded through a Continuing Resolution.

As we informed you at a recent Division Directors' meeting, we were anticipating that we might have to furlough up to 22 days in FY 2014. Since this meeting, we have identified additional cost cutting measures to include eliminating 50 percent of our non-IT contracting workforce. It is imperative that we make these reductions to minimize the impact of funding shortfalls on CFTC staff while protecting mission critical initiatives and agency internal controls.

As a result of the cuts identified, we should be able to realize an additional cost savings of 1.3 million dollars in FY 2014. This will allow us to reduce the number of furlough days from 22 to no more than 14 days. However, with these cuts, our agency will be unable to operate at the same level as we have in the past.

Effective on October 1, a number of services will be delayed or eliminated as follows (see attached for a more detailed summary):

Logistics and Operations:

- **Conference Center and Event Support** - Limited laborer services will be available, including set-up, break-down, and clean-up. There will be no hostess services (i.e., nametags, food service, beverage service, sign-in/greeting of guests, etc.)
- **Conference Rooms (KC and NY)** – There will be no reservation signage posted outside of conference rooms or water service provided
- **Transportation Services** – There will be no Commission vehicles, drivers, or messenger services. Transportation for CFTC business must be obtained by use of Metro, taxi, or personal vehicle (personal vehicle requires prior approval by FMB)
- **Newspapers and Publications** – In DC, there will be no delivery of newspapers, Congressional Record, or Federal Register. Recipients of current subscriptions must pick up newspapers at main reception desk.
- **Mail Services**
 - **DC**--Mail services continue, but the mailroom will no longer be staffed at all times.

ATTACHMENT 3

- **Regions**– LO will receive/sort mail and newspapers. Each Division must send a representative to pick up mail, including packages delivered by messengers, UPS and express mail.
- **Main reception activities in Regions** – The main reception desk will be staffed by LO (primary) and Division support staff (secondary). The 9th Floor reception desk in Chicago will not be staffed. All incoming calls to the main CFTC line will be rerouted and answered by the DC LO Help Desk. No staffing after 12 noon in KC.
- **Moves** - All movement of offices, furniture and boxes will be scheduled in advance and conducted on a monthly basis.
- **CFTC Badging** – By appointment only.
- **Help Desk Operations in Regions**– The local LO Help Desk will no longer be staffed. Calls and emails should be directed to the DC LO Help Desk.
- **Supply Room (KC and NY)** – The supply store will be on a self-serve basis.
- **Copy Centers (NY and KC)** will not be stocked with paper. Employees can pick up reams of paper as needed in the Supply Room in NY or Room 5409 in KC.

Other Services:

- **Flu Shots/Health Units:** Onsite flu shots are discontinued. Employees may obtain the shots free of charge from their physician or other locations. Offsite health units will no longer be available.

Compensatory Time Reductions: In order to be able to effectively monitor salaries and expenses Commission-wide, effective October 1, every effort should be made to reduce the use of compensatory time. All compensatory time must be approved in advance by the Executive Director.

These cuts while difficult, are also prudent and will help minimize the potential hardships that a furlough can impose on many of our employees. We will continue to effectively manage our budget in a manner that allows us to effectively accomplish the important mission of the Commission, while providing our employees with the support they need.

Feel free to contact me with any questions.

Tony

Anthony C. Thompson
Executive Director
Office of the Executive Director, Commodity Futures Trading Commission



ATTACHMENT 4

Appendix 001

From: [Lindsay, Laurie](#)
To: [Thompson, Anthony C.](#); [Radhakrishnan, Ananda](#); [Barnett, Gary](#); [Marcus, Jonathan L.](#); [Meister, David](#); [Rogers, John L.](#); [Mixon, Scott](#); [Josephson, Sarah E](#); [Shirts, Richard A.](#)
Cc: [Orchant, Alison](#); [Gilbert, Tomeka](#); [Bullard, Mark](#); [Bigelow, Lea-Ann](#); [Littlejohn, Margaret E](#); [Caravelli, Teresa](#); [Carrasco, Lorena](#); [Macklin, Alice](#); [Colon, Lauren](#); [Vargas, Jeffrey](#)
Subject: Work on holidays
Date: Wednesday, July 03, 2013 1:58:08 PM

Dear Colleagues:

With Independence Day tomorrow, I would like to take this opportunity to encourage each of you to be cognizant of your office's approval of holiday premium pay, given the current budget limitations.

As a reminder, all staff are entitled to holiday premium pay (double their normal hourly rate) for time they are required to work on a holiday. Generally, it should be requested and approved in advance which provides an excellent opportunity for you to evaluate whether the work is necessary or if it can wait until the next scheduled workday given the additional cost. Staff should not be authorized holiday premium pay because they have chosen to work on the holiday.

I appreciate your assistance in ensuring that we carefully manage our resources in light of our budgetary constraints. If you have questions regarding the approval of holiday premium pay, please contact [Lauren Colon](#) of the Human Resource Branch.

Happy 4th of July!

Laurie Lindsay
Chief Human Capital Officer

U.S Commodity Futures Trading Commission
Human Resources Branch

1155 21st Street, NW | Washington DC 20581 | Tel: 202.418.5625 | Email: llindsay@cftc.gov



ATTACHMENT 5

Reminder of Compensatory Time Provisions

Date	January 24, 2013
From	Human Resources
To	All Employees
Location	All CFTC Locations

The beginning of the new leave year is a good time to review the flexibilities provided by the CFTC Compensatory Time policy. Please take a few minutes to read the policy for details on these provisions.

Page Contact(s)



Colon, Lauren
Chief - Workforce
Relations
HR



Ullman, Paul
Employee Relations
Specialist
HR

Updated: 3/28/2013 1:24 PM

What is the purpose of the Compensatory Time policy?

- The Compensatory Time Policy provides CFTC staff additional flexibility to address the mission -critical needs of the agency
- Compensatory time represents a financial liability to the agency and strict guidelines govern its use
- Generally, managers and employees should avoid the need for compensatory time by planning to ensure that work and travel occur only during regularly scheduled hours

What provisions cover compensatory time?

- Supervisors can order or approve irregular or occasional overtime work that supports critical business needs
 - 1. If you are exempt from the Fair Labor Standards Act (FLSA), you receive compensatory time for overtime work; most CFTC employees are exempt
 - 2. If you are non-exempt from FLSA, you can choose to receive compensatory time instead of overtime pay
 - 3. You can find your FLSA designation in box 35 of your most recent SF-50, Notification of Personnel Action
- Must be approved in advance using CFTC Form 139, except in unusual circumstances
- You generally may earn no more than 16 hours of compensatory time for overtime work in any pay period
- You need to earn compensatory time before you can use it
- These provision do not apply to compensatory time for religious observances, which is addressed in the Absence and Leave policy

What happens if I don't use the comp time I have earned?

- Compensatory time for overtime work expires at the end of the 26th pay period after the pay period in which it was earned
- If you are exempt from FLSA, you will not be paid for expired compensatory time
- If you are non-exempt from FLSA, you will be paid for expired compensatory time

What about compensatory time for travel?

- You can request compensatory time for time spent in official travel status that is not otherwise compensated
- Must be approved in advance using CFTC Form 139
- You need to earn compensatory time for travel before you can use it
- Expires at the end of the 26th pay period after the pay period in which it was earned
- There are no provisions allowing for payment if not used
- You can find more information about earning and using compensatory time for travel in the Questions and Answers appendix

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OPERATIONS

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COMMISSION

- The Commission
- Divisions & Offices

ATTACHMENT 6

Appendix 001



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

February 27, 2013

M-13-05

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Danny Werfel
Controller

A handwritten signature in black ink, appearing to read "D. Werfel", written over the printed name and title.

SUBJECT: Agency Responsibilities for Implementation of Potential Joint Committee
Sequestration

Unless Congress acts to amend current law, the President is required to issue a sequestration order on March 1, 2013, canceling \$85 billion in budgetary resources across the Federal Government. Because these cuts must be achieved over the remaining seven months of the fiscal year, the Office of Management and Budget (OMB) estimates that the effective percentage reductions are approximately 9 percent for nondefense programs and 13 percent for defense programs. These reductions will result in significant and harmful impacts to national security and domestic priorities.

The President has been clear that sequestration is bad policy that was never intended to be implemented, and the Administration remains hopeful that Congress will act to avoid it through an agreement on balanced deficit reduction. However, because legislation may not be enacted to avoid sequestration before the current deadline of March 1, 2013, executive departments and agencies (agencies) with sequestrable accounts have been engaged in planning activities to operate at the lower, post-sequestration funding levels should it be necessary.

This guidance builds on prior communications with agencies about the implementation of sequestration, and addresses questions that have been raised as to certain categories of planning activities.

Agency Planning Activities

OMB Memorandum 13-03, *Planning for Uncertainty with Respect to Fiscal Year 2013 Budgetary Resources*, directed agencies to begin planning activities to operate with reduced budgetary resources in the event that sequestration occurs. Agencies' planning efforts must be guided by the principle of protecting the agency's mission to serve the public to the greatest extent practicable. Planning efforts should be done with sufficient detail and clarity to determine the specific actions that will be taken to operate under the lower level of budgetary resources

required by sequestration. For example, agencies should identify any major contracts that they plan to cancel, re-scope or delay as well as any grants that they plan to cancel, delay, or for which they plan to change the payment amount. Similarly, agencies should identify the number of employees who will be furloughed, the length of expected furloughs, the timing of when furlough notices will be issued, and the manner in which furloughs will be administered. In some cases, agencies may not be able to ascertain all of this information prior to March 1. However, agencies should continue to engage in intense and thorough planning activities to determine all specific actions that will be taken as soon as practicable.

Communications

To the extent permitted by law, agencies should inform their various partners and stakeholders in a timely and complete manner of the impact of sequestration so that third parties are able to adjust their operations and plans as appropriate. Accordingly, at this time, agencies should be actively and continuously communicating with affected stakeholders—including States, localities, tribal governments, Federal contractors, Federal grant recipients, and Federal employees—regarding elements of the agency’s planning that have a direct impact on these groups. These communications will vary greatly by agency and by stakeholder, but agencies should be as specific as possible in order to provide sufficient detail to be helpful to these stakeholders in understanding the implications of the reduced budget authority resulting from sequestration.

With regard to any planned personnel actions to reduce Federal civilian workforce costs, consistent with Section 3(a)(ii) of Executive Order 13522, agencies must allow employees’ exclusive representatives to have pre-decisional involvement in these matters to the fullest extent practicable and permitted under the law. In particular, in instances where agencies are considering potential furloughs, agencies have a duty to notify their exclusive representatives and, upon request, bargain over any negotiable impact and implementation proposals the union may submit, unless the matter of furloughs is already covered by a collective bargaining agreement. Agencies should ensure that they are fully aware of and in compliance with any and all collective bargaining requirements, and should consult with their General Counsel or appropriate labor relations office for questions regarding these requirements and appropriate interaction with employees and unions on these matters.

Acquisition

Due to the Government’s large acquisition footprint, sequestration will inevitably affect agency contracting activities and require agencies to reduce contracting costs where appropriate. As with all actions taken as a result of sequestration, agencies should ensure that any contract actions are both cost-effective and minimize negative impact on the agency’s mission to the extent practicable.

Program, acquisition, financial/budget management, information technology, and legal personnel should work together to make determinations regarding contracts in light of sequestration. As a general matter, agencies should only enter into new contracts or exercise options when they support high-priority initiatives or where failure to do so would expose the

government to significantly greater costs in the future. Agencies may also consider de-scoping or terminating for convenience contracts that are no longer affordable within the funds available for Fiscal Year 2013, should no other options exist to reduce contracting costs in these instances. Should such steps be necessary, agencies must evaluate the associated costs and benefits of such actions, and appropriately inform and negotiate with contractors. Finally, agencies should take all appropriate steps to minimize to the extent practicable the impact on small businesses of reduced contracting activities.

Financial Assistance

Given the widespread use of grants, loans and other Federal financial assistance to non-federal entities (e.g., State, local and tribal governments, non-profit organizations, and companies), sequestration will impact the funding of these activities.

As a general matter, agencies should ensure that any new financial assistance obligations or funding increases under existing agreements are consistent with the need to protect the agency's mission at the post-sequestration level. In light of sequestration, agencies may also consider delaying awarding of new financial assistance obligations, reducing levels of continued funding, and renegotiating or reducing the current scope of assistance. Agencies may be forced to reduce the level of assistance provided through formula funds or block grants. Should any such steps be necessary, agencies should evaluate the associated costs and benefits of such actions and appropriately engage and inform recipient(s) as early as possible.

Increased Scrutiny of Certain Activities

In determining the appropriate manner to achieve funding reductions, agency heads must also ensure that their agencies have risk management strategies and internal controls in place that provide heightened scrutiny of certain types of activities funded from sequestered accounts. To the extent these accounts remain at the post-sequestration funding level, increased scrutiny should apply to:

- hiring new personnel;¹
- issuing discretionary monetary awards to employees, which should occur only if legally required until further notice; and
- incurring obligations for new training, conferences, and travel (including agency-paid travel for non-agency personnel).

In light of the reduced budgetary resources available due to sequestration, expending funds on these activities at this time would in many circumstances not be the most effective way to protect agency mission to the extent practicable. Therefore, agency leadership should review processes and controls around these activities, and ensure that these activities are conducted only

¹ Agencies must also ensure that appropriate controls are in place to prevent the increased use of contractors to perform work due to any restrictions on hiring. Agencies should bear in mind the statutory restrictions contained in 10 U.S.C. 2461 and 41 U.S.C. 1710 on the conversion of functions from performance by Federal employees to performance by contractors.

to the extent they are the most cost-effective way to maintain critical agency mission operations under sequestration.

Please contact your OMB Resource Management Office (RMO) if you have any questions about or need assistance with this guidance.

ATTACHMENT 7

Appendix 001

From: [Carney, Mark](#)
To: [C:AILCFTC \(CFTC\)](#)
Subject: OED COMMUNICATION on Guidance for Operating Under Continuing Resolution in FY2013
Date: Tuesday, October 02, 2012 7:53:04 AM
Attachments: [image001.jpg](#)

OED COMMUNICATION**SUBJECT: Guidance for Operating Under Continuing Resolution in FY2013****Funding through March 27, 2013**

CFTC, like most federal agencies, will begin FY2013 funded through a Continuing Resolution (CR) rather than an annual appropriation.

When is the CR effective?

The CR is effective October 1, 2012 and provides for funding through March 27, 2013.

Who does this affect?

The CR affects directly or indirectly all CFTC staff. This memo provides guidance on measures CFTC employees must take to ensure compliance with the CR and to increase the likelihood that CFTC's critical daily operations will continue until Congress passes a FY2013 appropriation.

Funding Controls

Restricted funding requires that CFTC management take immediate action to ensure the cost of operations remains within funding allowances. Throughout the CR period, FMB will monitor closely the rate of obligations and provide further guidance on additional restrictions as appropriate.

Managers and employees, please be prudent and defer unnecessary or non-critical requests, so that CFTC may concentrate spending on mission essential activities.

Funding Level

The amount of funds CFTC may legally obligate during the CR period cannot exceed 48.77% (the percentage of the year covered by the CR) of the CR appropriation of \$206,550,399 (the FY 2012 appropriation of \$205,294,000 plus a 0.612% increase).

This funding will be split between Salaries & Expenses and Information Technology accounts as it was last year. Although this is a small increase over last fiscal year, CFTC is presented with an immediate challenge because employment levels and salaries increased over the past year and other expenses, related to leases and day-to-day operations, have increased due to previously executed contractual agreements or inflation.

Immediate Restrictions under the CR

General: CR funding only provides for the continuation of ongoing operations. No new program, projects, or activities may be started under the CR.

Hiring: Effective immediately and until otherwise notified, the Commission will restrict any further hiring. All written offers of employment made by the Human Resources Branch as of September 28, 2012 will be honored. Hiring may be permitted for critical need positions or to fill behind attrition on an exception basis as authorized by the Chairman to ensure that the Commission has sufficient financial resources.

Bankcard Purchases: Bankcard purchases should be suspended unless the expense is directly related to mission essential work (e.g. expenses incurred during investigation, filing, or litigation of an enforcement case).

Travel: Non-discretionary travel may continue and is defined as follows:

- A. Directed by the Chairman.
- B. Essential to performing the duties of a Commissioner.
- C. Essential to performing the duties at the CT-18 level.
- D. Travel that is directly related to an ongoing enforcement investigation or the litigation of an enforcement matter.
- E. Essential to International Coordination activities that result in a tangible deliverable, such as a Memorandum of Understanding or the issuance of report. When travel is required, wherever possible, only one participant should attend.
- F. A mandatory examination or review that cannot be postponed.
- G. Essential training requiring travel.

Staff travel that is primarily for sharing information and relationship building is not considered essential.

Discretionary travel must be postponed. If a discretionary travel order has been prepared, the travel order should be cancelled. Travel related to training already funded from FY2012 may be considered non-discretionary. Training attended in FY2013 but funded from FY2012, is permitted; however, training attended in FY2013 and funded from FY 2013 should be limited to mission-critical program work. Division and Office Directors, please review all travel and training requests to determine criticality on a case-by-case basis.

Further Information

FMB will continue to inform you of progress made in the passage of a CFTC FY2013 appropriation bill.

Questions?

Contact your Division/Office Business Manager or Andrew Pugh, Acting Budget Officer, at (202) 418-5934.

Mark Carney
Chief Financial Officer

Financial Management, U.S. Commodity Futures Trading Commission
1155 21st Street, NW | Washington DC 20581 | Tel: 202.418.5477 | Fax: 202.418.5414



From: Gensler, Gary
To: All CFTC (FTE)
Subject: CFTC Furloughs
Date: Thursday, October 24, 2013 8:02:42 AM

Dear Colleagues:

I am very sorry to inform you that the CFTC's budget situation makes it necessary to implement administrative furloughs of up to 14 days in FY 2014, which includes three days before January 15. As we discussed in the town hall, this CFTC furlough results from continued funding challenges, sequestration and a required minimum level Congress set for the CFTC's outside technology spending.

This is the budget reality we face. I understand this is extremely tough news for your families and you. I want to thank each and every one of you for your dedication to this agency and your hard work, which is of great benefit to the American public.

The CFTC avoided furloughs in FY 2013 by a) using carryover funds from FY 2012, b) implementing substantial cost savings, and c) transferring \$10 million from the otherwise "ring fenced" technology spending requirement. For FY 2014, though, we come into the year with minimal carryover funds. Further, we already have scraped our budget for savings. Our staff has shrunk by about 5 percent. Travel, discretionary spending and outside non-technology contractors have been cut to a bare minimum. As a result, we are now faced with administrative furloughs.

Tony Thompson, Laurie Lindsay and your supervisors will provide you with the details of how the administrative furloughs will work very shortly. Please contact them with any questions you may have. They will continue to work closely with all employees and provide you with up-to-date communication.

Once again, I truly appreciate the patience, resilience and incredible accomplishments of all of the staff at the CFTC.

Working with Congress and the Office of Management and Budget, we will continue to do everything we can to minimize the number of furlough days in FY 2014.

Gary



U.S. COMMODITY FUTURES TRADING COMMISSION

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www.cftc.gov

Office of the
Inspector General

February 21, 2014

TO: The Commission

FROM: A. Roy Lavik *ARL / JR*
Inspector General

SUBJECT: Review of the Commodity Futures Trading Commission's Response to
Allegations Pertaining to the Office of the Chief Economist

In January 2013, the Chairman requested our review of issues arising within the research program in the Office of the Chief Economist (OCE). We opened a preliminary investigation and did not find evidence of illegal disclosures of confidential information by OCE employees in economic research papers or otherwise. However, concerned that OCE research and publication had ground to a halt, we determined to convert the preliminary investigation to a review of research and publication processes in the OCE. In December 2013 we provided a discussion draft of our report to the full Commission. The draft report concluded that delays in the publication of economic research reports were unacceptable, identified potential legal deficiencies in the Agency's current publication processes, and recommended that the Agency's processes in this regard be both legal and prompt. We hoped to stimulate corrective action.

We thank CFTC management for its February 2014 response to our discussion draft; however, much of the response is devoted to legal arguments rather than corrective action. We stand by our original legal analysis, but an extended exegesis on the law seems pointless here. The discussion draft made clear that "we do not seek to reduce this matter to a mere legal issue." The problem, succinctly, is that the Agency as of February 20, 2014, has cleared for publication only seven of 24 pending OCE economic research papers over the past 14 months, with four of the seven cleared for publication yesterday. We are pleased with yesterday's progress, but fourteen months does not seem prompt.

The principle point is that an economic regulatory agency is potentially blocking itself off from the future input of highly qualified academics to assist the agency in its tasks. Published research is the coin of the realm in academia. Impediments to such research will likely decrease future useful expertise. That is our focus – rather than contesting different interpretations of, for instance, section 18 of the Commodity Exchange Act.

Time is the issue here. We care not how that time was divided internally; the Commission is the relevant unit. And it is the Commission that will bear the potential onus of obtaining any less input of relevant expertise going forward.

Our report is attached. I appreciate your continuing support of this Office.

Recipients:

Mark P. Wetjen
Acting Chairman

Bart Chilton
Commissioner

Scott D. O'Malia
Commissioner

Recipients (continued)

Joseph R. Cisewski,
Co-Chief of Staff & Co-Chief Operating Officer

Jonathan Marcus
General Counsel

Anthony C. Thompson
Executive Director

John L. Rogers
Chief Information Officer

Sayee Srinivasan
Chief Economist

Attachment:

Review of the Commodity Futures Trading Commission's Response to Allegations Pertaining to the Office of the Chief Economist (with appendices)

U.S. Commodity Futures Trading Commission
Office of the Inspector General

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by CFTC

Review of the Commodity Futures Trading
Commission's Response to Allegations Pertaining to the
Office of the Chief Economist

Prepared by the
Office of the Inspector General
Commodity Futures Trading Commission

February 21, 2014

This CFTC OIG Report is subject to the provisions of the Privacy Act of 1974, 5 USC § 552a, and has been redacted as determined by the Commodity Futures Trading Commission. The redactions are not determined by the CFTC OIG.

U.S. Commodity Futures Trading Commission
Office of the Inspector General

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Executive Summary

In December 2012, the Chicago Mercantile Exchange (“CME”)¹ alleged that certain publications by CFTC economists revealed information in violation of Section 8(a)(1)² of the Commodity Exchange Act (the Act).³ CME further questioned why the CFTC was permitting outside economists to access CFTC data, why the CFTC was permitting the publication of academic articles using that data, and finally, the administrative process by which the CFTC was employing these outside economists.

The Office of General Counsel (OGC) at the request of Chairman Gensler began an administrative review of the Office of the Chief Economist (OCE). Responsibility for the administrative review was assigned to the Deputy General Counsel for (b)(6)(b)(7)(C). The administrative review revealed that there had been poor record-keeping with regard to the so-called “on-boarding” process for OCE economists.⁴ The deficiencies included inadequate documentation of security clearances, issues regarding nondisclosure agreements, and non-submission of employment data to the National Finance Center, as well as incomplete personnel forms, one contract lacking the contractor’s signature, and other administrative errors. There were no indications of fraud by OCE economists, or that OCE economists were not actually appointed by the Chief Economist, just a number of administrative errors pertaining to the Agency’s so-called on-boarding processes. The review also uncovered information security concerns. Specifically, personally owned external hard drives and thumb drives were found in close vicinity to the computers that served the OCE economists. In addition, badges for former CFTC OCE economists were located in the Chief Economist’s desk.

On December 7, 2012, the assigned Deputy General Counsel, in consultation with the Chairman’s Office, instructed the Chief Economist to direct the OCE economists “to immediately cease sharing, publishing, distributing, or otherwise making available any papers or

¹ CME Group, Inc., is the holding company for five exchanges, CME, the Board of Trade of the City of Chicago, Inc., the New York Mercantile Exchange, the Commodity Exchange, Inc., and the Board of Trade of Kansas City, Missouri, Inc. *The Future of CFTC: Perspectives on Customer Protections*, 113th Cong., 1st Sess., Testimony of Terrance A. Duffy, Executive Chairman & President, CME Group, Inc., before the Subcommittee on General Farm Commodities and Risk Management of the House Committee on Agriculture (October 2, 2013) (available at: <http://agriculture.house.gov/sites/republicans.agriculture.house.gov/files/pdf/hearings/Duffy131002.pdf>). For a detailed description and history, see CME Group 2012 Annual Report, pages 2-3 (available at: <http://www.cme-group.com/investor-relations/annual-review/2012/downloads/cme-group-2012-annual-report.pdf>). All internet addresses cited in this report were last visited on February 20, 2014.

² Section 8(a)(1) prohibits the Commission from “publish[ing] data and information that would separately disclose the business transactions or market positions of any person and trade secrets or names of customers.” 7 USC 12(a)(1).

³ Letter from Mark Young and Jerrold Salzman on behalf of CME to Dan Berkovitz, dated December 14, 2012, is attached as Appendix E and is available here:

(b)(6),(b)(7)(C)

⁴ OCE economists include full-time employees (FTEs), consultants, and contractors.

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other products generated with Commission data to any non-Commission individuals or parties.”⁵ On December 11, 2012, the Chief Operating Officer notified our Office of the CME complaint and ongoing administrative review. On December 12, 2012, CFTC staff terminated access to OCEnet, and terminated access to all agency systems and databases for all OCE economists except for full-time employee economists in OCE.

On January 24, 2013, the Chairman wrote to our Office in detail, described CME’s concerns and OGC’s review, and stated that the review thus far indicated “there are issues regarding the use of non-public data by OCE and visiting academics.”⁶ The Chairman also stated that “there appear to be issues regarding the manner in which academic consultants and contractors were brought into the agency, their status with respect to the agency, their access to CFTC systems and information, and the adequacy of related documentation.” The Chairman stated, “I have directed the CFTC staff to suspend the external publication of research conducted or supported by OCE.” The Chairman also stated that he directed CFTC staff “to terminate access to non-public data by OCE personnel other than CFTC full-time employees within OCE.” The Chairman stated that “all of these issues warrant your review.” We agreed, and opened a preliminary investigation.⁷

In February 2013, Agency management issued stop work notices to 13 research economists working on contract and placed an additional eight research economists working as consultants on hold.⁸ For a year, OCE did not bring on new economists.⁹ OCE did not even employ unpaid consultants and unpaid interns. We estimate the total number of OCE economists between December 7, 2012, and January 2014, decreased from 39 to 11.¹⁰

In addition, in February 2013 the Office of the Chairman in consultation with OGC formed a technical committee of economists, statisticians, and others to review 24 OCE research

⁵ See the Chairman’s Letter to the Inspector General, January 24, 2013, attached as Appendix 2; December 7, 2012 email from (b)(6)(b)(7)(C), attached as Appendix 3.

⁶ See Appendix 2.

⁷ Later in the Spring, with no revelations of violations of Section 8 or other statutes or regulations by OCE economists, we converted our preliminary investigation to a review of research and publication practices in the Office of the Chief Economist. On April 4, 2013, CFTC publicly revealed that it “had not confirmed specific incidents of improper or unauthorized data disclosure, but review is ongoing.” Lynch, S. “CME Group Sparked Shutdown of CFTC’s Academic Research Program.” *Reuters* April 2, 2013 (available at: <http://www.reuters.com/article/2013/04/24/cftc-cme-research-idUSL2N0D91TT20130424>).

⁸ In addition, the Agency determined not to appoint three additional research economists in the appointment process at the time.

⁹ On December 5, 2013, the CFTC posted four job positions in the Office of Chief Economist on www.usajobs.gov. We view this as a positive development. On December 16, 2013, the CFTC announced the replacement of the current Acting Chief Economist with the appointment of Sayee Srinivasan as Acting Chief Economist (<http://www.cftc.gov/PressRoom/PressReleases/pr6794.13>). In our experience, it is unusual for a Chairman to reorganize a CFTC operating unit or division within days of his departure.

¹⁰ Between December 7, 2012, and January 2014, we estimate the number of full time staff in OCE decreased from 13 to nine, the number of OCE consultants decreased from 16 to two, and OCE contractors dropped from 16 to zero. Our estimates are based on information received from Agency staff.

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papers for information protected under Section 8, and for other confidential or sensitive information. A simple search conducted by our Office revealed that 18 of the 24 papers were available online, apparently prior to December 2012, and remain online today.¹¹ There is no indication that the Agency sought to remove any OCE research papers from the Internet.¹² However, the December 2012 instruction from the assigned Deputy General Counsel clearly prohibited all further publication and presentation absent prior permission.¹³

In any event, the Office of the Chairman (without a full Commission vote) installed OGC with authority to make the final determination regarding whether OCE research papers could be published (following Committee review and clearance), and this assignment fell to the assigned Deputy General Counsel. Since December 2012, the Committee has cleared ten papers for publication. OGC cleared three papers for publication in October 2013, and four additional papers in February 2014 (as of February 20).

Section 18 of the Commodity Exchange Act requires the CFTC to “establish and maintain” a “research and information program” that disseminates “educational and other informational materials” to market users and the public.¹⁴ Since 1976, OCE economists have implemented the requirements of Section 18(a) by conducting scholarly research on topics authorized by the Chief Economist, and publishing that research in academic journals. And throughout all that time, the research has included access to confidential information, including trade and other information protected under Section 8 of the Act. We believe shutting down the OCE research program in December 2012 and permitting the shutdown to endure for over 14 months has risked violating section 18 of the Act, especially in the absence of any significant movement toward restarting the program.

Section 8 prohibits the Commission from “publish[ing] data and information that would separately disclose the business transactions or market positions of any person and trade secrets or names of customers.”¹⁵ We find no indication in the law that the Commission’s practice of permitting OCE economists to use Section 8 data to conduct independent economic research on topics approved by the Chief Economist violates Section 8. We find no indication in the law that the use of Section 8 data in the preparation of academic articles – so long as the articles do not contain information protected under Section 8 – violates Section 8.

¹¹ In addition to the 24 papers, the Agency identified three additional economic research papers that they set aside for later review; all three are available online. We also located online five additional economic research papers published by CFTC economists during the past three years that were not pending before the Committee. Two of these papers had been reviewed by OGC prior to December 2012.

¹² In response to our discussion draft, the management response states that one paper was removed from the Internet prior to receipt of the complaint from CME. See Appendix 6, page 57. This removal was sought after concerns were raised regarding the possible use of information protected under section 8, even though Agency management determined that information protected under section 8 was not disclosed in the economic research paper. *Id.*

¹³ See Appendix 3.

¹⁴ 7 USC 22(a). Section 18 also requires the Commission to “include in its annual reports to Congress plans and findings with respect to implementing this section.” 7 USC 22(b).

¹⁵ See fn. 2.

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We agree with the initial findings of the OGC review that the administrative employment records for OCE economists contained administrative errors; however, we find no indication in the law that errors in administrative paperwork standing alone, in the absence of any statutory or other material impediment to an appointment, alters the status of otherwise properly appointed employees, consultants, or contractors. The authority of the Chief Economist to permit OCE economists to conduct economic research using information protected under Section 8 of the Act is not altered by such administrative error.¹⁶

We also agree with the initial findings of OGC's review that information security issues, both physical and technological, are present and need to be addressed; however, these same issues are present Agency-wide, and need to be recognized and addressed as such.

In December 2012, the Agency imposed a prior restraint on publication by all OCE economists. While it appears a public employer may, consistent with the First Amendment,¹⁷ institute a prior restraint on publication by public employees writing as private citizens if certain requirements are met, we find no precedent to support the process the Agency has adopted here. The length of time Agency management has taken to review and approve economic research papers is not acceptable. While we are sensitive to the complexities of the issues faced in connection with any valid pre-publication review of economic research by Agency employees, and we agree that the Agency has an interest in protecting information protected under Section 8 from unauthorized disclosure, we emphasize that Agency management did not determine during their initial review, and has still not determined over 14 months later, that any research proposed or published by an OCE economist has contained information protected from disclosure under Section 8.

Throughout our field work on this matter, we have repeatedly encouraged Agency management to begin permitting the publication of OCE economic research papers and to re-start the economic research program. In October 2013, some 10 months after the initial December 2012 shutdown, the Office of General Counsel approved three papers for publication. On December 18, 2013, we issued a discussion draft to the Agency in order to prompt corrective action. Agency management responded on February 12, 2014 (the management response).¹⁸ In February 2014, four more papers were cleared for publication (as of February 20, 2014).

We recommend that the Agency restart the OCE research program, including OCEnet, as soon as feasible. We recommend that administrative deficiencies in record-keeping and security

¹⁶ We find it interesting that though the procedural lapses largely occurred in other administrative units, OCE bore the brunt of penalty for these errors.

¹⁷ "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances." U.S. Const. amend. I.

¹⁸ The management response is attached as Appendix 6. The management response, and other comments received in response to our discussion draft, prompted clarifying changes and corrections of minor facts, however, our conclusions and recommendations are not altered.

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clearances in OCE be resolved in like fashion as currently resolved for other CFTC employees. We believe information and physical security issues are not unique to OCE, and should be addressed agency-wide. We recommend that the Commission assure the legality of any prior review process for OCE research papers and presentations, and that any prior review undertaken by the Agency be prompt.

Finally, we stress the importance of economic research at CFTC, an economic regulatory agency. For over 35 years OCE has attracted some of the highest qualified economists in the country among both its full-time staff and its limited term appointments. In order to continue to attract outstanding scholars, the Commission must support the goals of economic research coupled with academic integrity, and must make any pre-clearance process (whether voluntary or mandatory) a priority in terms of both legality and speed.

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APPENDICES

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Appendix 6 – Management Response

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Introduction

CME Issues an Oral Complaint; OGC Indefinitely Halts all Publication by CFTC Economists after a Two-Day Review

On or about Wednesday, December 5, 2012, two attorneys representing CME spoke with then-CFTC General Counsel Dan Berkowitz to express concerns about a recent publication by former CFTC economist (b)(6), (b)(7)(C).¹⁹ CME explained that it had received questions from several market participants, and that the concern was that this paper revealed trade information in violation of Section 8 of the Commodity Exchange Act. CME questioned Mr. Berkowitz regarding (b)(6), (b)(7)(C)'s status at CFTC, how he received access to the material, and regarding what controls were placed on the use of CFTC data.

After being briefed on CME's concerns, the Chairman directed the Deputy General Counsel for (b)(6), (b)(7)(C)²⁰ to review the situation in OCE. OGC set out to examine the activities of OCE's employees, contractors, and consultants. OCE economists can be employed as regular employees (full or part-time), consultants, or contractors, and OGC learned that Andre Kirilenko, the former Chief Economist, did not know the particular employment status of all the economists, including some he had hired. Employees in the Office of the Executive Director (OED) initially were not able to inform OGC whether (b)(6), (b)(7)(C) was a contractor or a consultant; however, he did have a CFTC email account and network access. Employees within OED also did not immediately know if (b)(6), (b)(7)(C) had a CFTC building badge.

By December 7, 2012, the assigned OGC deputy was unable to obtain detailed information on staffing in OCE.²¹ At close of business on December 7, 2012, the OGC Deputy, in consultation with the Chairman's Office, "directed the Chief Economist to insure that all OCE employees, consultants, and contractors cease sharing, publishing, distributing, or otherwise making available any papers or other products generated with Commission data to any non-Commission individual or parties."²²

On December 10, 2012, the General Counsel notified the Commissioners by email of CME's phone call of December 5 and the decision to suspend OCE publications. The email did not describe the Chairman's involvement. The Chief Operating Officer forwarded the General Counsel's email to this Office the same day. Meanwhile, OGC's review continued.

¹⁹ (b)(6), (b)(7)(C) is a graduate of (b)(6), (b)(7)(C).

(b)(6), (b)(7)(C)

and (b)(6), (b)(7)(C)

(b)(6), (b)(7)(C)

(b)(6), (b)(7)(C)

²⁰ The Deputy for (b)(6), started with the Commission on (b)(6), (b)(7)

²¹ Flaws in administrative record-keeping for OCE economists were eventually revealed.

²² See Appendix 3.

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Further OGC Review Reveals Information Security Concerns and Prompts Further OCE Restrictions

On or about December 10, 2012, an OGC attorney consulted with the Chief Economist regarding trade data used by OCE economists. She learned that OCE used a dedicated server to store trade data to facilitate its work. The Chief Economist could not tell her what was on the server, nor could he tell her who had access to the server. The server was physically accessible by anyone with access to the OCE offices, which means any CFTC employee or authorized guest with a temporary pass card. The server could be used only with a valid CFTC username and password.

The OGC attorney learned that information could be removed from the server through any thumb drive or external hard drive. Thumb drives and an external hard drive that may not have been CFTC-purchased or approved were found near the server.²³ The OGC attorney removed the thumb drives and external drive, and gave them to CFTC information technology personnel with expertise in forensic analysis. The forensics team (usually assigned Enforcement-related forensics examinations) was tasked with examining the OCE server.

The Chief Operating Officer briefed the Chairman on these new information security issues, and the Chairman informed that, "[o]n December 12, 2012, the CFTC terminated access to the agency systems and databases, including OCEnet, of all individuals in the OCE research program other than full-time agency employees within OCE."²⁴

Separately, OGC learned that OCE economists may have blocked (or attempted to block) system administrator access to the OCEnet by ODT computer specialists assigned to the system; this assertion was disputed. We focused on this allegation during our fieldwork. All interviewees with knowledge agreed that ODT did experience a delay in accessing OCEnet when their usual method of access did not work. We are not sure whether the usual method of access was altered by OCE and, if so, whether it was done for the purpose of somehow wresting control of OCEnet from ODT. What we learned from staff was that there were alternative methods of access to OCEnet, and staff in ODT was well aware of these methods because they had set up OCEnet. ODT was able to access OCEnet after a relatively brief delay, and in any event they were able to access OCEnet on the same day they first attempted access.

²³ ODT personnel informed us that equipment used for OCEnet was not always documented, including external hard drives.

²⁴ See Appendix 2.

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CME Submits Detailed Allegations

CME documented its concerns in a letter dated December 14, 2012 (CME letter).²⁵ The letter stated that CME became concerned when it reviewed an article "co-authored by Andrei Kirilenko."²⁶ CME did not identify the title of this article. The letter also addressed a second article co-authored by Kirilenko concerning the "Flash Crash," published in 2010. Finally, the CME expressed concern regarding a third article, authored by (b)(6),(b)(7) on the subject of high-frequency trading. (C)

CME asserted that "the use of Section 8 data – including trade secrets – for the preparation of non-Commission sponsored publications violates Section 8."²⁸ CME alleged that "the Commission's Chief Economist has both used Section 8 data and provided access to Section 8 data to non-CFTC economists and their assistants for purposes of publishing academic research," and again asserted that such access would violate Section 8.²⁹ CME included a list of seven issues it believed to be raised by this conduct:

1. Has the Commission authorized its Chief Economist to use Section 8 data for purposes of his academic research? Is the choice of research topic reviewed in advance by any officer of the Commission? If so, which officer? Are the Commissioners given any advance notice that the research is being conducted? Are the Commissioners required to give formal approval before the research is published?
2. If the Commission has authorized its Chief Economist to use Section 8 data for purposes of his academic research, what is the statutory or other legal basis for that authorization?
3. What system of supervision is in place to review any such research before publication, and what was done in the cases referenced above? Who approved the publication of Dr. Kirilenko's research? Who approved the selection of individuals to whom the data was provided? In what form was the data provided? What specific data elements were provided? What safeguards were employed to protect the data that was exposed to non-Commission employees? Did Dr. Kirilenko or anyone else at the CFTC utilize data aliasing mechanisms to protect identifying data elements? What data is allowed to leave CFTC premises? If so, what was done to protect that data after it leaves the premises? Is the data provided to third parties

²⁵ See Appendix 1.

²⁶ Andrei Kirilenko served as Chief Economist from December 2010 until December 2012; he was an economist with OCE from May 2008 to December 2010. He received his PhD in Economics from the University of Pennsylvania, where he specialized in Finance. Currently he serves as Professor of the Practice of Finance at the MIT Sloan Center for Finance and Policy.

²⁷ Available here: (b)(6),(b)(7)(C)

²⁸ CME Letter (Appendix 1).

²⁹ *Id.*

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reviewing the research as part of a peer review process? What processes are in place to provide assurance that all data provided to third parties is returned to the CFTC and is not used by third parties for any reason not authorized by the CFTC?

4. Absent specific Commission authorization, does the Chief Economist have authority to use Section 8 data for purposes of his academic research?
5. Has the Commission or the Chief Economist authorized non-Commission employees, including "academics" or their assistants, to have access to Section 8 data for any purpose?
6. If so, for what purpose, subject to what limitations and protections and under what legal authority?
7. If the Commission or its Chief Economist provides Section 8 data to non-Commission employee "academics," how does the Commission select which non-Commission employee "academics" to favor with Section 8 data for their private research?

Continuing Responsive Action by OGC

OGC drafted a new and more strongly worded non-disclosure agreement, and obtained non-disclosure agreements from most OCE employees, consultants, and contractors, including those employees for whom an NDA was already on file.³⁰ Multiple flaws in administrative record-keeping for OCE economists were eventually revealed. With regard to (b)(6), (b)(7)(C) staff in OED concluded that he was properly appointed but his SF52 was not completed properly in all regards.³¹ For one OCE consultant, there was no record of on-boarding documentation other than the required clearance documentation.

On January 24, 2013, Chairman Gensler formally requested assistance from our Office.³² The Chairman stated that a review of the OCE research program indicated "there are issues regarding the use of non-public data by OCE and visiting academics." The Chairman stated:

Additionally, there appear to be issues regarding the manner in which academic consultants and contractors were brought into the agency, their status with respect to the agency, their access to CFTC systems and information, and the adequacy of related documentation.

³⁰ We received no indication that the language of the existing NDAs was deficient.

³¹ On December 17, 2012, a CFTC security officer completed a repeat security clearance report for (b)(6), (b)(7)(C) stating no issues or concerns. An initial security clearance had been completed prior to (b)(6), (b)(7)(C) start date at CFTC, also with no concerns or issues noted.

³² The Chairman's letter is attached as Appendix 2.

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The Chairman stated that he had "directed the CFTC staff to suspend the external publication of research conducted or supported by OCE," and terminated "access to non-public data by OCE personnel other than CFTC full-time employees within OCE." The Chairman stated that CFTC's "review of the matter is ongoing," that it included review of "the human resources, procurement, logistics, data, and legal issues raised by the OCE research program," and that the Agency "will take any further steps that we deem appropriate." The Chairman stated that he believed that "all of these issues warrant your review." On or about January 30, 2013, the Chairman publicized his referral to our office, and briefed the press, Congress, and the staff of OCE. OED reported that in February 2013, it issued stop work orders for 13 OCE economists working on contract, and placed on hold eight OCE consultants.³³

The Deputy General Counsel for (b)(6),(b)(7)(C) instructed CFTC OIG that: 1) someone with incomplete on-boarding paperwork (or on-boarding paperwork with administrative errors) is not properly appointed; 2) anyone not properly appointed may not access CFTC data protected under Section 8; and 3) anyone not properly appointed may not publish or present economic research produced during a period of improper documentation. These considerations apparently played a role in the decrease in OCE contractors and consultants, as well as the continued shutdown of OCE research, and cessation of publication and presentation by OCE economists. Data security concerns also played a role, if not with regard to publication, at least with regard to the shutdown of OCEnet.

The initial review by OGC revealed that the paper by (b)(6),(b)(7)(C) had been reviewed by the Chief Economist and by a staff attorney in the Office of General Counsel (b)(6),(b)(7)(C). The initial review by OGC did not reveal that, for the past several years, whenever there were concerns regarding appropriate aggregation³⁴ of trade data in a proposed economic research paper (b)(6),(b)(7)(C) would refer the matter to an economist in the Division of Market Oversight (DMO) experienced with aggregation issues (b)(6),(b)(7)(C).³⁵ The (b)(6),(b)(7)(C) paper was reviewed by (b)(6),(b)(7)(C), (b)(6),(b)(7)(C), and (b)(6),(b)(7)(C) collectively had more than 60 years experience at the CFTC. (b)(6),(b)(7)(C) and the Chief Economist all concluded that the (b)(6),(b)(7)(C) paper presented no instances of misuse of information protected under Section 8.

Nevertheless, in February 2013, the Office of the Chairman in consultation with OGC formed a technical committee of economists, statisticians, and others to review 24 OCE research papers (including the (b)(6),(b)(7)(C) paper) for information protected under Section 8, and for other confidential or sensitive information. Eighteen of the 24 papers were already readily available online, and other economic research papers were available online but not included on

³³ See fn.10 and accompanying text.

³⁴ Aggregation is used to mask the individual identity of firms or individuals.

³⁵ In February 2014, Agency management clarified that their initial review "did not reveal the (b)(6),(b)(7)(C) paper, or any other paper." See Appendix 6, pages 57-58.

³⁶ In February 2014, Agency management informed that the (b)(6),(b)(7)(C) paper was presented or published on three occasions prior to review by Agency staff in the OIG and DMO in 2012. See Appendix 6, page 57 and fn.272.

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the list of 24.³⁷ The Office of the Chairman installed the Office of General Counsel with authority to make the final determination regarding whether OCE research papers could be published, and this assignment fell to the Deputy General Counsel for (b)(6), (b) In June 2013, the Committee cleared three papers for publication, and cleared an additional seven after that. In October 2013, the OGC approved three papers for publication. OGC cleared four additional papers for publication in February 2014 (as of February 20).

Scope and Methodology

Due to staffing limitations and competing priorities, fieldwork for our review began in March 2013. Our objective was to address the following concerns raised by the Chairman in his January 2013 letter, to wit: “issues regarding the use of non-public data by the OCE and visiting academics,” and “issues regarding the manner in which academic consultants and contractors were brought into the agency, their status with respect to the agency, their access to CFTC systems and information, and the adequacy of related documentation.”

In order to complete our review, we interviewed over 30 individuals in the Office of the Chief Economist, the Office of General Counsel, the Office of Data Technology, the Office of Security and Emergency Management (within the Office of Logistics and Operations), and within the Office of the Executive Director, employees in the Office of Human Resources and the Procurement sub-office within the Office of Financial Management. Some witnesses were interviewed on multiple occasions. We reviewed available hiring documents for OCE economists for the past three years, and reviewed relevant economic research papers prepared by them. We researched pertinent legal principals and the history of the Office of Chief Economist.

Background

History of Economic Research by CFTC: Section 18 of the Commodity Exchange Act

Last year the CEA held two hearings on the subject of Commodity Puts and Calls. The national administrator had stated at that time that previous studies of puts and calls had been conducted by the Agriculture Department. I subsequently learned that the studies were made, believe it or not, in 1934! Worse, the 1934 study was based on data and information gathered in 1927 - 1930!...

This is but a single example of the kind of naïve and meaningless research conducted by the CEA in vital areas entrusted to its responsibility.

³⁷ See fn.11.

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Legislative History of the Commodity Exchange Act of 1974.³⁸

The Commodity Futures Trading Commission Act of 1974³⁹ included new section 18,⁴⁰ which provides as follows:

Section 18. Research and Information Programs:

The Commission shall establish and maintain, as part of its ongoing operations, research and information programs to (1) determine the feasibility of trading by computer, and the expanded use of modern information system technology, electronic data processing, and modern communication systems by commodity exchanges, boards of trade, and by the Commission itself for purposes of improving, strengthening, facilitating, or regulating futures trading operations; (2) assist in the development of educational and other information materials regarding futures trading for dissemination and use among producers, market users, and the general public; and (3) carry out the general purposes of this Act.

Regardless of whether section 18 was a direct response to the testimony quoted at the start of this section, in adopting it Congress clearly intended for the CFTC to include as part of its operations a robust research program. It is equally clear that Congress intended that the research program include economic research.⁴¹

A Brief History of the Office of the Chief Economist

Section 18 of the Act mandates the production and dissemination of economic research, and the Commission has complied since its creation. The name and organizational placement of the Office of Chief Economist has varied during the CFTC's history, but economic research activities have been described in nearly every Commission annual report:

- The Commission's 1976 annual report included a description of the "Division of Economics and Education," and described research on "electronic data processing" and other topics, including topics dealing with economics.⁴²
- The CFTC 1977 annual report reported that the new Office of Chief Economist "began a research program to determine if futures markets really work in the national interest and

³⁸ Senate Committee on Agriculture and Forestry, *Hearing on S. 2485, S. 2578, S. 2837, and H.R. 13113*, 93rd Cong., 2d Sess., May 21 and 22, 1974, pg. 811.

³⁹ Pub. L. No. 93-463, 88 STAT. 1389 (Oct. 23, 1974).

⁴⁰ *Id.* at sec. 416, codified at 7 USC 22(a).

⁴¹ Legislative history includes recognition that "computerized trading may well be the wave of the future, but many questions of both technological and economic feasibility must be answered before it can or should be implemented." H.Rept. No. 93-975, 93rd Cong., 2d Sess., 52 (April 4, 1974) (quoting Mr. Caldwell, Administrator of the Commodity Exchange Authority).

⁴² 1976 CFTC Ann. Rep. pages 100-103.

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to develop better public understanding of how and why the markets function.”⁴³ OCE “carries the major CFTC responsibility for analyzing and improving competitive performance and increasing public understanding of futures market contributions to the allocation of basic resources.”⁴⁴

- The CFTC 1978 annual report stated that OCE “sponsors long-term research into the functioning of futures markets to ensure that the markets are as competitive as possible.”⁴⁵ It referred to completion of “projects pertaining to ... a longer-term understanding of futures markets functions.”⁴⁶
- From 1984 through 1994, CFTC annual reports contained the recitation that OCE “conducts economic research as part of the Commission’s mandate under the Commodity Exchange Act.”⁴⁷
- CFTC annual reports between 2001 and 2006 stated that OCE economists presented papers or published papers, stating: “[s]taff members write and review papers for professional journals and participate in a variety of industry meetings and seminars.”⁴⁸ In 2004, CFTC’s annual report contained a detailed description of research performed.⁴⁹
- More recent CFTC annual reports state that “[t]he Chief Economist provides economic support and advice to the Commission, conducts research on policy issues facing the agency, and provides education and training for Commission staff.”⁵⁰

CFTC currently states on its public website:

OCE conducts research on major policy issues facing the Commission; assesses the economic impact of regulatory changes on the futures markets and other sectors of the economy; participates in the development of Commission

⁴³ 1977 CFTC Ann. Rpt. pages 38-39, 77-83.

⁴⁴ *Id.* at 80.

⁴⁵ 1978 CFTC Ann. Rpt. 96.

⁴⁶ *Id.*

⁴⁷ This quote is found in CFTC annual reports from 1984 through (and including) 1994.

⁴⁸ 1995 CFTC Ann. Rpt. 48. Reference to presented papers by research economists is found in 2001 CFTC Ann. Rpt. 63, 2002 CFTC Ann. Rpt. 83, 2003 CFTC Ann. Rpt. 67, 2004 CFTC Ann. Rpt. 65, 2005 CFTC Ann. Rpt. 35, 2006 CFTC Ann. Rpt. 52.

⁴⁹ CFTC’s 2004 Annual Report stated:

OCE staff members continue to present their research findings at industry conferences and academic annual meetings and frequently have those findings published in refereed academic journals. During FY 2004, staff papers presented or published in this way covered topics relating to price discovery, hedging and risk aversion, the theory of storage, electronic versus open outcry trading, and factors affecting derivatives market success or failure. Papers were accepted for publication or published in academic journals such as *The Journal of Finance*, *The Journal of Business*, *The Journal of Futures Markets*, and *The Southern Economics Journal*.

2004 CFTC Ann. Rpt. 65.

⁵⁰ This quote is found in CFTC annual reports for 2009-2012. It appears that only the 2007 and 2008 annual reports contain no reference whatsoever to economic research conducted by OCE.

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rulemakings; provides expert economic support and advice to other CFTC offices; conducts special studies and evaluations; and participates in the in-house training of staff on matters related to futures, options, swaps, and risk management.⁵¹

The CFTC's 2013 *President's Budget and Performance Plan* listed among OCE's Fiscal Year 2011 accomplishments the following: "Composed at least 7 working papers on Commission oriented topics made available to the public with 25 presentations and 3 publications."⁵² We found no reference to OCE publications or presentations in CFTC's 2014 budget document.⁵³

CFTC currently posts four OCE research papers on its public website;⁵⁴ the papers are published with disclaimers⁵⁵ such as: "This paper reflects the opinions of its authors only, and not those of the CFTC, the SEC, the Commissioners, or other staff upon either Commission. All remaining errors and omissions, if any, are the authors' sole responsibility"⁵⁶ and "[t]he views expressed in this paper are those of the authors only and do not reflect the views of the CFTC or its staff."⁵⁷

Current and former CFTC economists publish papers in a variety of journals, including the *Journal of Alternative Investments*,⁵⁸ the *Energy Journal*,⁵⁹ and the *Journal of Futures*

⁵¹ See <http://www.cftc.gov/About/EconomicAnalysis/index.htm>.

⁵² CFTC, *2013 President's Budget and Performance Plan*, available at <http://www.cftc.gov/reports/presbudget/2013/2013presidentsbudget0802.html>.

⁵³ CFTC, *2014 President's Budget and Performance Plan*, available at: <http://www.cftc.gov/reports/presbudget/2014/2014presidentsbudget0920102.html>.

⁵⁴ Buhksahin, Haigh, and Robe, *Commodities and Equities: A "Market of One"*, June 9, 2008. This paper was published in the *Journal of Alternative Investments*, 12(3):61-75 (available on the CFTC public website:

http://www.cftc.gov/pressgroups/public/@aboutcftc/documents/file/a/marketofone_update0608.pdf). (b)(6), (b)(7)(C)

(b)(6), (b)(7)(C) this paper is on the list of papers for review by the Committee). The other two papers are noted at fn 45 and fn 46.

⁵⁵ Disclaimers that are "reasonably prominent" and that convey that "the views expressed in the article do not necessarily represent the views of the agency," are required by regulation at 5 CFR 2635.807(b).

(b)(6), (b)(7)(C)

(b)(6), (b)(7)(C)

(b)(6), (b)(7)(C) this paper is on the list of papers for review by the Committee.

⁵⁷ Haigh, Hirmanova, and Overdahl, *Price Dynamics, Price Discovery and Large Futures Trader Interactions in the Energy Complex* (working paper, April 28, 2005). This paper is available on the CFTC public website: <http://www.cftc.gov/files/opa/press05/opacific-managed-money-trader-study.pdf>.

⁵⁸ See fn 54.

⁵⁹ Buhksahin, Lee, Moser, and Robe, *Physical Market Conditions, Paper Market Activity, and the WTI-Brent Spread*, *The Energy Journal*, Vol. 34, No. 3 (2013). This article was also published by the Energy Information Agency (see fn 61).

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Markets.⁶⁰ The Federal Reserve Board and the Energy Information Agency currently publish papers co-authored by CFTC OCE economists.⁶¹ Of course, economists in OCE are not the only CFTC economists writing and publishing papers addressing economic thought as it pertains to futures trading. A partial list of 103 economic research papers authored by OCE economists, Commissioners, and other CFTC employees, is attached as Appendix 3.

OCEnet

OCEnet was a stand-alone computer network created in 2008 to assist an inter-agency collaboration to conduct energy market research using CFTC and other data.⁶² The Commission kept the network separate for security purposes; it did not want to grant individuals from other agencies access to the entire CFTC network. OCEnet also permitted users to run complex programs necessary to analyze economic data.⁶³

With regard to inter-agency collaboration, other agencies would identify the data they wanted to review and request that it be transferred from the CFTC network to the stand-alone server. A CFTC employee would load the requested data onto an external hard drive and then transfer it to OCEnet. For additional security, the server and desktops were placed in a separate room; keys were provided to designated individuals in OCE.

Over time, inter-agency use appears to have dropped off, while internal use by OCE economists increased. As overall demand for OCEnet grew, additional equipment was provided for its use. What began as approximately five desktops (and a server) grew to nearly twenty. The advantages of OCEnet for research purposes were many: like any server, it stored data so

⁶⁰ Aulerich, Fische, and Harris, *Why do Expiring Futures and Cash Prices Diverge for Grain Markets?*, *Journal of Futures Markets*, Vol. 31, Issue 6 (2010).

(b)(6), (b)(7)(C)

(b)(6), (b)(7)(C)

max paper is on the list of papers currently under review by the Committee; Bonussana, Lee, Moser, and Kovs, *Physical Market Conditions, Paper Market Activity, and the WTI-Brent Spread*, November 2012 (available at: http://www.eia.gov/finance/markets/reports_presentations/2012/PaperBrentWTI.pdf).

⁶² The result of this collaboration, *Interagency Report on Crude Oil* (July 2008), is available here: <http://www.cftc.gov/ucv/groups/public/@newsroom/documents/Files/interagencyreportoncrudeoil0708.pdf>.

⁶³ The Federal Reserve Board (FRB) offers similar research capabilities to its economists. Its website states: "Economists at the Federal Reserve Board conduct innovative research on a broad range of topics in economics and finance. In addition to presenting their research to policymakers, Board economists share their research at academic conferences and publish it in peer-reviewed journals and other scholarly outlets." The FRB economists:

... conduct research and other analysis on high-performance computer servers, which run both Linux and Windows operating systems. These servers offer a full suite of econometric and statistical software packages on both platforms. Economists and technical staff regularly review and improve, as needed, the capacity and speed of processors and the range of software available to Board economists for their research. Several hundred datasets covering a range of topics from micro-level banking/financial data to aggregate macroeconomic time series statistics are available for use by economists in their research.

This information is available online at <http://www.federalreserve.gov/econresdata/default.htm> and <http://www.federalreserve.gov/econresdata/researchsupport.htm>.

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that it did not need to be separately loaded onto the many desktops; it was faster, meaning that the manipulation and study of datasets could occur more quickly; and it contained unique programs for the manipulation of data. Additionally, it allowed OCE to bring on outside economists to do research while limiting access to the CFTC network.

By late 2011, the Office of Data and Technology had enhanced control over the network in order to increase information security. A new system of individual user accounts had been established; previously, access for all users had apparently been via a single log-in and password.⁶⁴ While information security increased, physical security declined; OCEnet computers and server were moved from a separate, lockable room to a common area. This decrease in physical security occurred, apparently, because the original justification for physical security of the server and desktops was no longer supported; OCEnet was now being used primarily by CFTC economists rather than individuals from other agencies. OCEnet continued operating in this manner until it was shut down in December 2012.

Procedures for Publishing and Presenting OCE Papers (Pre-December 2012)

The Chief Economist approved all topics for economic research papers written by OCE economists working as employees, contractors and consultants.⁶⁵ For contractors, the economic research issue was determined in advance and was described in the contract. For consultants and employees, the process of selecting a topic for economic research was not determined in advance. Rather, potential topics could be suggested by the Chief Economist, by any Commissioner, Division Director, or any CFTC employee, including OCE economists. Regardless of the source, all research topics required approval of the Chief Economist.

Prior to December 2012, submission of a completed research paper to the Chief Economist was not strictly required; however, OCE economic research papers were subject to a rigorous academic review process and we believe most if not all papers were separately (and voluntarily) submitted to the Chief Economist. If the paper included aggregated trade information protected under Section 8, the Chief Economist would refer the paper to the Office of General Counsel for further review. OGC would assign the paper to a staff level attorney. Most recently, the staff attorney assigned (b)(6),(b)(7) had more than 25 years experience at CFTC. The OGC attorney reviewed trade data in the economic research paper for conformity with accepted aggregation standards for other CFTC publications. In case of doubt, the OGC attorney would seek advice from an economist (b)(6),(b)(7) in the Division of Market Oversight (DMO) with expertise in trade data aggregation standards for Commission publications, and over 35 years experience at CFTC. This process of voluntary internal review had been in place since at least the 1990s.

⁶⁴ These accounts were separate from the username and password accounts to access the CFTC network generally. ODT and OCE retained administrative access to the new system.

⁶⁵ We are not aware of any publications by CFTC interns in OCE.

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(b)(6),(b)(7)(C)'s paper on high frequency trading,⁶⁶ went through this process prior to publication. It was reviewed by the Chief Economist, by the staff attorney (b)(6),(b)(7)(C) in OGC, and by the economist in DMO (b)(6),(b)(7), and was cleared for publication. All concluded that the paper did not include information protected under Section 8.

The Commission's Use of Information Protected under Section 8 of the Commodity Exchange Act

Overview

Section 8 of the Commodity Exchange Act reads as follows:

For the efficient execution of the provisions of this Act, and in order to provide information for the use of Congress, the Commission may make such investigations as it deems necessary to ascertain the facts regarding the operations of boards of trade and other persons subject to the provisions of this Act. The Commission may publish from time to time the results of any such investigation and such general statistical information gathered therefrom as it deems of interest to the public: *Provided*, That except as otherwise specifically authorized in this Act, the Commission may not publish data and information that would separately disclose the business transactions or market positions of any person and trade secrets or names of customers....

Commodity Exchange Act, Section 8(a)(1); 7 USC § 12(a)(1).

In brief, the Act grants the Commission wide discretion to investigate and publish the results of such investigations. It also contains a prohibition; the Commission may not "publish data and information that would separately disclose the business transactions or market positions of any person and trade secrets or names of customers."⁶⁷ This restriction is a limited one; a statutory prohibition against publication is not as strict as a statutory prohibition against disclosure.⁶⁸

In *Freeman v. Seligson*,⁶⁹ the Federal Court of Appeals for the District of Columbia Circuit addressed whether Section 8 prohibited compliance with a subpoena in a judicial proceeding, and determined that the requested information protected under Section 8 must be disclosed. Of course this is not the situation here; however, the court's discussion of the history

⁶⁶ Available here: (b)(6),(b)(7)(C)

⁶⁷ CEA, Section 8(a)(1); 7 USC sec. 12(a)(1).

⁶⁸ In *re England*, 375 F.3d 1169, 1180 (C.A.D.C., 2004) (recognizing existing precedent that "general statutory bans on publication do not bar limited disclosure in judicial proceedings" and recognizing the difference between statutory prohibitions against publication, which are less strict, and statutory prohibitions categorically barring disclosure).

⁶⁹ *Freeman v. Seligson*, 405 F.2d 1326 (C.A.D.C. 1968).

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and meaning of Section 8 is informative. The court stated that “the language used and the statutory setting plainly reflect Congressional concern with widespread dissemination of information not otherwise available to the public.”⁷⁰ The court stated that “[t]he bar to publication is linked to, and should be read against the backdrop of, the Secretary’s duties under the Act to furnish information and data about futures trading and commodities to the concerned public at large.”⁷¹

The *Freeman* court went on to state that the legislative history of Section 8 “does establish as a matter of fair implication that the prohibition was not intended to embrace the separate and limited kind of disclosure that arises in judicial proceedings.”⁷² While the court in *Freeman* did not address the use of Section 8 data *within* the Agency, we believe that an equally “fair implication” to that drawn by the court in *Freeman* is that the prohibition to publish “was not intended to embrace the separate and limited kind of disclosure” that arises when individuals employed by CFTC and physically present at the CFTC are granted access to information protected under Section 8 in the course of their work for the Commission. In fact, we would not expect a court to interpret Section 8 to prohibit the Commission from sharing data protected under Section 8 from any person as determined by the Commission necessary to carry out the Commission’s mission under the Commodity Exchange Act, so long as the disclosure is not public. We note that the Commission’s regulations and Privacy Act notices indicate that a number of non-public disclosures of information protected under Section 8 may be permissible.⁷³

We also note that no penalty is provided for violations of Section 8; however, the theft of confidential government information, including business information, may be a criminal offense in certain circumstances under 18 U.S.C. 641.⁷⁴

Aggregation and Section 8

Section 8 prohibits the Commission from “publish[ing] data and information that would separately disclose the business transactions or market positions of any person and trade secrets or names of customers,”⁷⁵ but it does not prohibit publication of aggregated and anonymized trade data. The Commission recognizes this distinction when it publishes aggregated and

⁷⁰ *Id.* at 1349. Indeed, more recent cases have stated similarly that, in adopting the prohibition against publication in Section 8, “Congress was concerned with ‘widespread dissemination of information not otherwise available to the public’” *In re England*, *supra*, 375 F.3d at 1180 (*quoting Freeman v. Seligson*, *supra*, 405 F.2d at 1349).

⁷¹ *Id.*

⁷² *Id.*

⁷³ The Commission’s Privacy Act Systems Notices for record systems, including systems that include information protected under Section 8, may be found at 78 Fed. Reg. 5974 (Feb. 2, 2011) (<http://www.cftc.gov/ucm/groups/public/@lrfederalregister/documents/file/2011.2133a.pdf>).

⁷⁴ *U.S. v. Di Gilio*, 538 F.2d 972 (2d Cir. 1976), *cert. denied sub nom. Lupo v. U.S.*, 429 U.S. 1038 (1977). The First Amendment ramifications of attempting to penalize under 18 U.S.C. 641 disclosures of confidential government information have been noted in case law. *See, U.S. v. Truong Dinh Hung*, 629 F.2d 908, 925 and n.17 (4th Cir. 1980); *U.S. v. Vincenzi*, 1988 U.S. Dist. LEXIS 17436 *27-*29.

⁷⁵ *See* *fn. 2*.

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anonymized trade data in its Bank Participation (BPR) and Commitments of Traders Reports (COTR). The Commission has stated:

For the purposes of protecting the confidentiality of participants' business transactions or market positions as required under Section 8(a)(1) of the CEA, the Commission has historically created guidelines for various market information reports (e.g., Bank Participation Reports ("BPRs") and Commitments of Traders ("COT") reports) that prevent market participants and the public from reverse-engineering aggregate data to determine the participants that submitted the data.⁷⁶

In other words, the Commission routinely publishes business transactions and market positions – but it aggregates and anonymizes that data to prevent anyone from discovering the identity of the firms in the aggregated dataset.

Specifically, the BPRs "aggregate large-trader positions of banks participating in various financial and non-financial commodity futures,... [and] includes data for every market where five or more banks hold reportable positions."⁷⁷ The Commission goes on to state:

For purposes of protecting the confidentiality of participants' market positions (as required under § 8(a) of the Commodity Exchange Act), when the number of banks in either category (U.S. Banks or Non-U.S. Banks) is less than four, the number of banks in each of the two categories is omitted and only the total number of banks is shown for that market.⁷⁸

CFTC also publishes its Commitment of Traders Reports (COTR)⁷⁹ in a manner that, in its opinion, does not result in disclosures that violate Section 8. The Commission describes the COTR as "a weekly breakdown of each Tuesday's open interest for markets in which 20 or more traders hold positions equal to or above the reporting levels established by the CFTC."⁸⁰ The following description is available on the CFTC website:

Reports are available in both a short and long format. The short report shows open interest separately by reportable and nonreportable positions. For reportable positions, additional data is provided for commercial and non-commercial holdings, spreading, changes from the previous report, percents of open interest by category, and numbers of traders.

⁷⁶ 75 Fed. Reg. 76139 (Dec. 7, 2010) (available at <http://www.cftc.gov/LawRegulation/FederalRegister/ProposedRules/2010-29994>).

⁷⁷ CFTC, *Bank Participation Report: Explanatory Notes*, available at: <http://www.cftc.gov/MarketReports/BankParticipationReports/ExplanatoryNotes/index.htm>.

⁷⁸ *Id.*

⁷⁹ The Commission's COTR dates back to 1924.

⁸⁰ CFTC, *About the COT Reports*, available at http://www.cftc.gov/MarketReports/CommitmentsofTraders/AbouttheCOTReports/cot_about.

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The long report, in addition to the information in the short report, also groups the data by crop year, where appropriate, and shows the concentration of positions held by the largest four and eight traders. The Supplemental report is published for Futures-and-Options-Combined in selected agricultural markets and, in addition to showing all the information in the short format, shows positions of Index Traders.⁸¹

On November 20, 2013, the Commission announced a new weekly swaps report that is modeled on the COTR. In an announcement the Commission stated: "To prevent the disclosure of individual market participants' positions and proprietary trading strategies, the CFTC Weekly Swaps Report is prepared using a series of statistical screens, helping to ensure that the values presented do not inadvertently reveal confidential information."⁸²

While aggregation of information protected under Section 8 has been standardized for purposes of various CFTC market publications, no aggregation standards have been set for research papers by OCE economists. Our interviews indicated that any review of OCE research papers for possible impermissible disclosures of information protected under Section 8 can be complex, requiring an examination of context to determine whether aggregated trade data in an economic research paper may be reverse engineered – by reference to publicly available data or otherwise – to permit the reader to ascertain the identity of the trader.

Findings

The Decision to Suspend Economic Research Risks Violating Section 18 of the Commodity Exchange Act

In December of 2012, the OGC, in consultation with the Office of the Chairman, "directed the Chief Economist to ensure that all OCE employees, consultants, and contractors cease sharing, publishing, distributing, or otherwise making available any papers or other products generated with Commission data to any non-Commission individuals or parties."⁸³ In addition, CFTC terminated access to agency systems and databases, including OCEnet, to all OCE personnel other than CFTC full-time employees within OCE.⁸⁴ The OCE research program as it existed prior to December 2012 remains halted over a year later. OCEnet has not been revitalized (or replaced with comparable research capabilities), and the Agency has not approved most of the economic research papers it decided to review in December 2012.⁸⁵

⁸¹ *Id.*

⁸² CFTC Press Release 6780-13 (available at: <http://www.cftc.gov/PressRoom/PressReleases/pr6780-13>).

⁸³ See Appendix 2.

⁸⁴ *Id.*

⁸⁵ Research by OCE economists to support other ongoing Agency work continues.

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We realize that section 18 does not specifically require the Commission to conduct economic research through the publication and presentation of *juried* economic research; however, it has been the practice at CFTC for over 35 years. Historically, the CFTC has stated that the Office of Chief Economist performs a Commission mandate through the publication of independent economic research, a statement with which we strongly agree.⁸⁶ To jeopardize the sponsorship of *juried* economic research is to limit knowledge imparted to Congress, to the public, and to the Commission itself on economic issues impacting trillions of dollars -- such as high frequency trading.

We believe the OCE shutdown potentially violated Section 18 of the Commodity Exchange Act. The duration of the shutdown increases this potential.

OGC Management Conflated Improper Administrative On-boarding Paperwork with Improper Access to and Improper Use of Information Protected under Section 8

As previously stated, OGC management concluded that someone with incomplete paperwork is not properly on board, and that someone not properly on board may not access CFTC data protected under Section 8. OGC further concluded that someone who was not properly on board may not publish or present economic research papers produced during a period of improper documentation because the employee was never properly authorized to view information protected under Section 8. When we specifically requested precedent for this interpretation, we were told this interpretation derives solely from the language of Section 8. Multiple witnesses told us their understanding was that on-boarding documentation was relevant to the consideration whether an OCE economist could view information protected under section 8, and conduct, present, and publish research based on such access. We reviewed multiple spreadsheets prepared by OED showing the on-boarding status of each OCE economist, which indicates to us that the policy was at the least being considered, if not implemented. However, the Chief Operating Officer maintained that this interpretation was never adopted by the Commission as an official policy.

Instances of administrative errors leading to on-boarding failure included examples such as the failure to report to the National Finance Center (NFC) information regarding unpaid consultants.⁸⁷ For (b)(6),(b)(7)(C) it appears that two of three required signatures were in place on his SF52 (including the Chief Economist's signature), but the third individual tasked with signing it -- the OHR employee -- only partially signed her signature. It also appears that the SF52 was mostly but not fully completed. In the personnel records we reviewed, we also noted a

⁸⁶ See fn.47 and accompanying text.

⁸⁷ NFC is the federal entity that processes CFTC's payroll. Even though unpaid consultants are not paid, their information is apparently supposed to be sent on to NFC anyway.

⁸⁸ Office of Personnel Management (OPM) Standard Form (SF) 52, Request for Personnel Action. Available here: http://www.opm.gov/forms/pdf_fill/sf52.pdf.

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number of unsigned SF52s and SF50s.⁸⁹ For one OCE contractor, OED staff determined that the contract was not signed by the contractor.⁹⁰

Another instance of administrative irregularity involved the OCE economist, (b)(6), (b)(7)(C).⁹¹ Former Chief Economist James Moser requested network access for this economist on June 9, 2010, but his contract with CFTC was not executed until (b)(6), (b)(7)(C). Contemporaneous records relating to (b)(6), (b)(7)(C) on-boarding and network access indicated that network access was not granted until the contract was signed; however, the delay appears to have been due to technical difficulties, and not due to the fact that the economist, though appointed by the Chief Economist, was not yet under contract. In fact, we found no indication of an awareness that the submission for network access predated (b)(6), (b)(7)(C) contract date, and no indication that it was brought to the attention of management at the time.

There was also an economist, (b)(6), (b)(7)(C).⁹² for whom it initially appeared CFTC had no records at all; yet he had already published a paper as a CFTC employee. Staff in OED eventually located (b)(6), (b)(7)(C)'s security clearance, but they were never able to locate an SF52 showing his appointment as an unpaid consultant.

We interviewed Agency employees in the Office of Human Resources (responsible for administrative on-boarding for consultants and employees), the Procurement Office (responsible for administrative on-boarding for contractors), and the Security Office (responsible for security clearances for all employees, consultants, contractors and others). We were told that OCE economists were processed the same as other employees, consultants, and contractors at CFTC. We did learn that, occasionally, OHR or Procurement would find that an OCE economist selected by the Chief Economist and submitted as a consultant or as a contractor had already been processed or was already being processed by the other Office – that is, the Chief Economist would submit the same individual to be hired as both contractor and consultant at the same time, apparently intent on getting the person onboarded as quickly as possible.

These parallel on-boarding processes were not characterized by OHR or Procurement employees as a fatal flaw to the individual's ability to come on board as a CFTC employee, consultant, or contractor. But they were definitely an annoyance. After discovery of a dual process, it appears that the OCE economist simply would remain in the status processed furthest

⁸⁹ OPM SF 50, Notification of Personnel Action. Available here: <http://www.opm.gov/forms/pdfimage/sf50.pdf>.

⁹⁰ We offer no opinion on the legal effect of this missing signature as it pertains to the contractual relationship between the contractor and CFTC.

⁹¹ (b)(6), (b)(7)(C) is a graduate of (b)(6), (b)(7)(C) and the (b)(6), (b)(7)(C). He currently works in the (b)(6), (b)(7)(C).

⁹² (b)(6), (b)(7)(C) is a graduate of (b)(6), (b)(7)(C) and the (b)(6), (b)(7)(C). He currently works in the (b)(6), (b)(7)(C).

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to completion at the time of discovery. We were also told that the Chief Economist had been very aggressive trying to onboard economists, with the early submission of (b)(6), (b)(7) for network access prior to official on-boarding appearing to be the most serious example.

Because there was no indication of fraud or bad faith by the economists, or evidence that the appointments by the Chief Economist were unauthorized, the nature of the administrative errors appeared to us to be non-substantive, and capable of being fixed. Other than the submission of individuals to be consultants and contractors at the same time, there appeared no explanation for the administrative errors that would indicate OCE employees were treated differently than other agency employees as it pertains to administrative onboarding. We did not investigate if similar deficiencies in the administrative on-boarding paperwork have been found for employees, consultants, and contractors in other CFTC Divisions.

We did ask if deficiencies in security clearances for other CFTC employees have been encountered, which in our view would be a more serious matter. We learned that during a fairly recent period in which CFTC implemented new security badges, CFTC employees agency-wide were found with lapsed security clearances. For some long-term employees, CFTC had no security clearance on file at all for the duration of the employee's career at CFTC. Employees with lapsed or absent security clearances included employees with access to information protected under Section 8 and other sensitive information.

The process for dealing with the discovery of inadequate security clearances, we were told, was to leave the employee in place and to process the security clearance. Only if the security clearance could not be completed due to problems with the employee's background would action be taken to remove the employee. Moreover, even if the employee could not be retained, prior work completed by the employee would remain valid unless there was extrinsic evidence that the work was not adequately performed. This approach finds support in the law.

Comptroller General opinions could not be more clear that "[a]n officer 'de facto' is one who performs the duties of an office with apparent right and under color of an appointment and claim of title to such office. That is, where there is an office to be filled, and one acting under color of authority fills said office and discharges its duties, his actions are those of an officer 'de facto.'"⁹³ This rule is not ironclad, but the two exceptions to this rule are not present here:

- (1) The appointment was made in violation of an absolute statutory prohibition, or
- (2) The employee was guilty of fraud in regard to the appointment or deliberately misrepresented or falsified a material matter.⁹⁴

⁹³ *Assistant Comptroller General Yates to the Secretary of the Treasury*, B-98693, 30 Comp. Gen. 228, 1950 U.S. Comp. Gen. LEXIS 93 *5 (Dec. 5, 1950) (*cited in, In the Matter of Compensation for Services Rendered Pending Appointment*, B-181934, 55 Comp. Gen. 109, 1975 U.S. Comp. Gen. LEXIS 103 *6 (July 23, 1975)).

⁹⁴ *Matter of: Sidney P. Arnett and Mary Ann Barron - Erroneous Appointments - De Facto Employment*, B0220720, B0220791, 1986 Comp. Gen. LEXIS 576 (Sept. 8, 1986) (examples of statutory bars would include anti-nepotism statutes, etc.).

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The Comptroller General recognizes as a general rule – regardless of whether a *de facto* employee may be paid for his or her efforts or may continue in his position⁹⁵ – that “acts performed while a person is serving in a *de facto* status are as valid and effectual insofar as they concern the public and the rights of third persons as though he were an officer *de jure*.”⁹⁶ It is also clearly the law that the government has every authority to ratify the acts of agents acting with apparent authority: “a sovereign may waive its right (to be bound only by actually authorized acts).”⁹⁷ In fact, in the Comptroller General opinions we reviewed, we encountered no cases where a *de facto* employee’s work was invalidated due to administrative error in hiring documentation.

In short, it appears that there is no basis to equate improper on-boarding paperwork with improper access to CFTC confidential data in a situation (such as this) where a heightened security clearance is not required.⁹⁸ Similarly, there appears to be no basis to invalidate or indefinitely delay work product by OCE economists who suffer administrative irregularities in their on-boarding paperwork.

We note with approval that it appears the OGC’s proposed policy has not been officially adopted by the Chairman or the Commission. Nevertheless, we would be remiss if we did not note the potential unfairness inherent in the proposed policy. It appears that no one in OCE or

⁹⁵ In Comptroller General opinions addressing administrative errors affecting federal employee status, the ultimate issue is always whether the employee may be paid, which is not what we are looking at today. We cite these opinions for their statements on the subsequent treatment of employee work when the employee is not properly brought on board.

⁹⁶ *Matter of the Acting Federal Insurance Administrator’s Status and Authority*, B-183012, 56 Comp. Gen. 761; 1977 U.S. Comp. Gen. LEXIS 100 (June 29, 1977). See also, *Matter of Earle W. Cook - Compensation for Services Prior to Appointment*, B-198575, 1981 U.S. Comp. Gen. LEXIS 83 (Aug. 11, 1981) (When an Acting Insurance Administrator appointed by the director of the Department of Housing and Urban Development lacked authority to serve for a period of about nineteen days, during which time he signed decision letters, issued regulations, and testified before Congress in his unauthorized official capacity, the Comptroller General stated: “[W]e cannot consider [the Acting Administrator] a usurper, devoid of any color of authority. At all times relevant he performed the duties of the office of Insurance Administrator with the knowledge and apparent acquiescence of the Secretary and the President. In our view, he meets the definition of a *de facto* officer or employee....”).

⁹⁷ Restatement (Third) Of Agency § 2.03, comment g, (2006). Ratification, of course, does not apply solely to contract actions. “Any act which, if done under proper authority, would be lawfully charged to a principal may be ratified when done without authority by an agent or subagent.” 2A CJS Agency § 55 (2013). In *Matter of the Acting Federal Insurance Administrator’s Status and Authority*, B-183012, 56 Comp. Gen. 761; 1977 U.S. Comp. Gen. LEXIS 100 (June 29, 1977), the Comptroller General suggested that a successor consider ratification of those actions by a *de facto* Acting Insurance Administrator – which included decision letters, new regulations, and Congressional testimony – with which she agreed, to avoid any confusion as to their binding effect.

⁹⁸ Certainly the lack of a security clearance is relevant to these considerations. In *In the matter of Compensation for Services Rendered Pending Appointment*, 55 Comp. Gen. 109, B-181934 (July 23, 1975), a retired Army officer assigned as Executive Assistant to an Ambassador-at-Large served in that position for seven months before the Department of State determined he could not be appointed due to his failure to pass a required security clearance. Despite the failure of appointment, this individual served in good faith, performed services under color of authority, and with no indication of fraud, and with the Comptroller General noting that the employee did not handle classified material and that “the lack of security clearance apparently had little impact on his job performance.” In this circumstance, the Comptroller General determined that this individual was a *de facto* employee during the period of service.

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OGC was aware of the administrative errors in OCE economists' on-boarding paperwork until December 2012. Moreover, it appears that, at least until December 2012, irregularities in on-boarding processes and paperwork were simply addressed by fixing the irregularity at staff level. For instance, the discovery of dual hiring processes for new OCE economists were not documented or brought to the attention of management that we can see. Similarly it appears that, at the time, nobody documented or brought to the attention of management the fact that (b) (b)'s initial request for network access was made by the Chief Economist and in process with ODT for more than two weeks before his contract was signed.

Given the importance OGC now gives to on-boarding paperwork – at least for some OCE staff⁹⁹ – we are at a loss to understand why accuracy was never emphasized before December 2012. Further, we do not understand why this policy, if necessary at present, is not being implemented Agency-wide.

In any event, we simply fail to see any connection whatsoever between a public employee's on-boarding paperwork and that same employee's right to publish on matters of public concern as a private citizen, even if the public employee's efforts are sponsored by the government.

The Decision to Prohibit Publication of Completed Research and Institute Mandatory Prior Review Raises First Amendment Issues

As previously discussed, without regard to the content of research papers prepared by OCE economists, the Deputy General Counsel for (b)(6),(b)(7) determined that any employee, consultant, or contractor with administrative onboarding deficiencies may not view information protected under section 8, and to apply the prohibition retroactively. As previously stated, we have found no legal support for this course of action.

Separately, CFTC management determined to form a committee which is reviewing the content of all papers written by OCE economists (regardless of on-boarding documentation and regardless of whether the author included or had access to information protected under Section 8) and which will permit publication only of research papers approved by the committee and by the Office of General Counsel. We believe this course of action may potentially violate the law.

The First Amendment and Federal Employee Publications

Federal employees clearly do not enjoy the same First Amendment¹⁰⁰ rights as private citizens. The Supreme Court has recognized that “even many of the most fundamental maxims of our First Amendment jurisprudence cannot reasonably be applied to speech by government

⁹⁹ Indeed, it appears that OCE onboarding errors were not all treated the same even after December 2012. Earlier this year, one of the OCE contractors was simply transferred to the Office of Data Technology even though Agency staff recognized that his contract previously had been implemented while lacking the contractor's signature.

¹⁰⁰ See *fn.17*.

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employees,”¹⁶¹ and that the federal government has “far broader powers” to regulate the speech of federal employees than it has to regulate the speech of the public at large.¹⁶² But that does not mean that federal employees lose all First Amendment protections merely by virtue of their status as employees.

In order to be protected by the First Amendment, speech by a public employee must speak on a matter of public concern, and the employee’s interest in expressing himself, as a private citizen, in commenting upon matters of public concern must outweigh the interest of the State, as an employer, in promoting the efficiency of the public service it performs through its employees.¹⁶³ It is clear that the First Amendment does not shield from discipline the expressions public employees make pursuant to their professional duties; however, the Supreme Court has specifically declined to determine whether the fact of public employment similarly alters the First Amendment rights of public employees engaged in speech related to scholarship or teaching.¹⁶⁴ Context is key in determining whether an individual who works for the government is speaking as a private citizen or as a public employee performing official duties.

We believe the employment situation for OCE economists is clear-cut in this regard: in addition to their assigned tasks relating to ongoing Agency operations, OCE economists are hired by CFTC to perform independent academic research. The position description for a level CT-12 research economist states that, in addition to supporting the Commission in its work:

[T]he incumbent also participates in the planning and execution of special projects, primarily long-term studies with little precedent. The incumbent is expected to be prepared to present and review papers at professional meetings and conferences and to contribute to the literature in the field and identify the effects associated with implementing proposed standards, regulations, and policies.¹⁶⁵

Similarly, the position description for a level CT-15 supervisory economist states that, in addition to supporting the Commission in its work:

As a recognized expert in the economic and statistical analysis of futures and swaps markets, the incumbent is expected to be sought out to serve on panels and

¹⁶¹ *Waters v. Churchill*, 511 U.S. 661, 671-672 (1994).

¹⁶² *Id.*

¹⁶³ *Pickering v. Board of Education*, 391 U.S. 563, 568 (1968).

¹⁶⁴ In *Garcetti v. Ceballos*, 547 U.S. 410, 426 (2006), the Supreme Court rejected “the notion that the First Amendment shields from discipline the expressions employees make pursuant to their professional duties,” but specifically declined to address the application of First Amendment rights to speech by public employees related to academic scholarship. *Id.* at 425 (“There is some argument that expression related to academic scholarship or classroom instruction implicates additional constitutional interests that are not fully accounted for by this Court’s customary employee-speech jurisprudence. We need not, and for that reason do not, decide whether the analysis we conduct today would apply in the same manner to a case involving speech related to scholarship or teaching.”).

¹⁶⁵ Position description for (b)(6),(b)(7)(C)

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to present and review papers at professional meetings and conferences, to contribute to the literature in the field....¹⁰⁶

The position descriptions in our view indicate that OCE economists are required to create and publish economic research not merely to the extent that such research supports the Commission in its work. They are required to create economic articles that comport with academic standards and expand knowledge in the field; and we believe the requirements of academic integrity would require such research to be developed independently of Commission policy.¹⁰⁷

Independence from Commission policy is also evidenced by the fact that the Commission requires OCE economists to publish their research papers and presentations with a disclaimer that their views do not represent those of the Chairman, the Commission or its employees.¹⁰⁸ Even if the Commission has hired an employee, consultant, or contractor for the purpose of requiring research on a specific economic topic selected by the Chief Economist, the disclaimer is required when the research is complete and ready for publication. Assurance of academic integrity would require no less, in our view.¹⁰⁹

Of course, the Commission may publish economic research through Commission-approved publications prepared by staff economists, and has done so in the past.¹¹⁰ The fact that the Commission has published OCE staff economic research in the past, as an official CFTC report and without any disclaimer, indicates to us that the Commission is fully aware – as it has performed this function since 1976 – that economic research papers published under a disclaimer are done so because the author is publishing not as a Commission employee voicing official CFTC policy or opinion, but as a private citizen.¹¹¹

Consideration of CFTC OCE economist position descriptions, CFTC's required disclaimers for OCE economist research papers, the fact that the papers undergo a juried review, and the contrasting staff economic research reports published without disclaimer, lead to the

¹⁰⁶ Position description for (b)(6), (b)(7)(C).

¹⁰⁷ Some contract employees in OCE are hired solely to perform independent research on topics approved by the Chief Economist. Others are hired to perform other services, such as IT services.

¹⁰⁸ Disclaimers that are "reasonably prominent" and that convey that "the views expressed in the article do not necessarily represent the views of the agency," are required by regulation at 5 CFR 2635.807(b).

¹⁰⁹ We would contrast disclaimers used in situations where staff is speaking at the direction of or with the approval of Commission management as part of their official duties in situations that do not involve scholarship, such as: staff no-action letters, Commission-sponsored or Commission-attended meetings and conferences, and Agency website postings. In such situations the Commission representative does not speak as a private citizen, but the disclaimer makes clear that the representative's statements may not necessarily represent the Commission's views.

¹¹⁰ For instance, in 2008 the Office of Chief Economist published in cooperation with representatives of other regulators a paper titled, "Interim Report on Crude Oil," which was not published with a disclaimer. Available here: <http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/07/interimreportoncrudeoil0708.pdf>.

¹¹¹ As late as 2012, OGC staff attorneys applied the CFTC regulations pertaining to writing completed in an employee's personal capacity to OCE economic research papers, at least on occasion. See Appendix 6, page 41 n.190. This practice has stopped.

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conclusion that CFTC knows and acknowledges that OCE economists publish their scholarly research as private citizens.¹¹² The fact of their employment, pay (for some economists), required topic approval, and access to confidential information, all authorized by the Commission, in our view should not change this conclusion.

Prior Restraints and the First Amendment

Introduction

A prior restraint has been described as any governmental order “that prohibit[s] the publication or broadcast of particular information or commentary – orders that impose a ‘previous’ or ‘prior’ restraint on speech.”¹¹³ The repugnance of prior restraints has been recognized from the earliest expressions of the Anglo-American legal tradition. Blackstone wrote:

Every freeman has an undoubted right to lay what sentiments he pleases before the public; to forbid this, is to destroy the freedom of the press; but if he publishes what is improper, mischievous or illegal, he must take the consequence of his own temerity.¹¹⁴

The Supreme Court has recognized that prior restraints are abhorrent:

{P}rior restraints on speech and publication are the most serious and the least tolerable infringement on First Amendment rights. A criminal penalty or a judgment in a defamation case is subject to the whole panoply of protections afforded by deferring the impact of the judgment until all avenues of appellate review have been exhausted. Only after judgment has become final, correct or otherwise, does the law’s sanction become fully operative.

A prior restraint, by contrast and by definition, has an immediate and irreversible sanction. If it can be said that a threat of criminal or civil sanctions after publication ‘chills’ speech, prior restraint ‘freezes’ it at least for the time.¹¹⁵

The Supreme Court has cautioned that the government’s required prior review of protected speech, even when permissible, must afford affected citizens due process prior

¹¹² The fact that OCE economic research papers often concern the articulation of new or controversial ideas, and could reasonably be described as an exercise of so-called “academic freedom” also weighs in favor of treating OCE economic research papers as private speech. See *Weihua Huang v. U Va.*, 896 F.Supp.2d 524, 543 n.12.

¹¹³ *Nebraska Press Ass’n v. Stuart*, 427 U.S. 539, 556 (1976).

¹¹⁴ 4 Bl. Com. 151, 152 (quoted in *Near v. Minnesota*, 283 U.S. 697, 714 (1930)).

¹¹⁵ *Nebraska Press Ass’n v. Stuart*, *supra*, 427 U.S. at 559.

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to any final restraint, and must assure a prompt final judicial decision.¹¹⁶ The Supreme Court has cautioned that any government system of prior restraint must take place "within a specified brief period," and has criticized a prior review and judicial appeal process running to 10 months.¹¹⁷ The Supreme Court has stated that "any system of prior restraints of expression comes to this Court bearing a heavy presumption against its constitutional validity."¹¹⁸

Prior Restraints and Mandatory Prior Review of Public Employee Publications

The government clearly may require prior submission of a public employee's speech as a private citizen if the government can demonstrate sufficient interest in staying informed of public employees' public statements about matters of concern to the workplace.¹¹⁹ We believe the Commission has a clear interest in being apprised of OCE economic scholarship before it is presented or published. However, we have found no precedent to support the length of time currently involved with the Agency's review process.

In order to impose a prior restraint on speech by a public employee, speaking or publishing as a private citizen, the government must demonstrate that

...the interests of both potential audiences and a vast group of present and future employees in a broad range of present and future expression are outweighed by that expression's 'necessary impact on the actual operation' of the Government.¹²⁰

In addition, the standards used to evaluate employee speech "must possess 'narrow, objective, and definite standards' to guide the decision-maker."¹²¹

Even when a prior restraint is warranted, the Government may be limited in the action it may take, internally, to prevent violative speech from publication.¹²² Even a permissible prior

¹¹⁶ *Freedman v. Md.*, 380 U.S. 51, 55-59 (1964).

¹¹⁷ *Id.* See also, *Déjà vu of Nashville, Inc., et al. v. Nashville, et al.*, 2006 U.S. App. LEXIS 16323, *13 and n.4; 2006 FED App. 0432n (6th Cir. 2006) (recognizing the "stringent standard" set out in *Freedman* for prompt judicial review for government-imposed prior restraints on First Amendment activities).

¹¹⁸ *Bantam Books, Inc. v. Sullivan*, 372 US 58, 70 (1963). See also, *Shelton Police Union, Inc. v. Voccola*, (25 F. Supp. 2d 604, 623 (D. Conn. 2001)) ("The government's burden of demonstrating that its interests outweigh the interests of the speakers is greater in cases involving a prior restraint as opposed to cases involving isolated disciplinary action.").

¹¹⁹ *Latino Officers Association, et al. v. Safir, et al.*, 170 F.3d 167, 172 (1999); *Weaver v. United States Information Agency (Weaver)*, 87 F.3d 1429, 1442 (D.C. Cir. 1996), cert. denied, 1997 U.S. LEXIS 3405 (1997).

¹²⁰ *U.S. v. National Treasury Employees Union (NTEU)*, 513 U.S. 454, 468 (1995) (citing *Pickering*, 391 U.S. at 571).

¹²¹ *Horman v. City of New York (Horman)*, 140 F.3d 111, 120 (2d Cir. 1998) (quoting *Shuttlesworth v. City of Birmingham*, 394 U.S. 147, 151, 89 S. Ct. 935, 938, 22 L. Ed. 2d 162 (1969)).

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review process could be invalidated if it involves lengthy delays because, “[i]f the prior review were extensive, of course, it might delay constitutionally protected speech to a time when its only relevance was to historians.”¹²⁵ In addition, the government’s determination to suppress speech must afford the affected party prompt judicial review.¹²⁴

In contrast, the Supreme Court has recognized that the Central Intelligence Agency may enforce against its employees reasonable publication restrictions over classified information.¹²⁵ This authority stems from the “compelling interest” that the government has “in protecting both the secrecy of information important to our national security and the appearance of confidentiality so essential to the effective operation of our foreign intelligence service.”¹²⁶ It includes the authority to bar publication by current and former CIA employees without prior authorization.¹²⁷ Nothing in the Commodity Exchange Act indicates that information protected under Section 8 may receive the same protections as classified information, and it appears very clear that similar restrictions do not apply to non-classified information generally.

The Office of Government Ethics has recognized that required prior review and approval of federal employee publications risks violating the First Amendment. In 1991, the Office of Government Ethics proposed the following regulation of federal employee publications (proposed § 2635.807(c)):

Approval of content. An employee shall comply with any requirement for advance agency review, clearance, or approval of the content of any speech, book, article or similar product.¹²⁸

This proposed regulation did not survive the rulemaking process. OGE explained:

¹²² In *Weaver*, the Court suggested that “[a]n agency confronted with a recalcitrant employee who refused to eliminate classified information might wish to seek an injunction against publication of the offending section of the employee’s material.” *Weaver*, *supra*, 87 F.3d at 1442 n.5.

¹²³ *Weaver*, *supra*, 87 F.3d at 1441 (the quoted language is *dicta*, the court noted that “*Weaver* has not alleged that the review under § 628.2 is lengthy”); *Hannon*, *supra*, 140 F.3d at 120 (“By delaying the review process, the employer has the power to destroy the immediacy of the comment on agency affairs, and thus, in many cases, its newsworthiness. In such cases, ‘dissemination delayed may prove tantamount to dissemination denied.’” (citations omitted)); *Freedman*, *supra*, 380 U.S. at 59 (noting the deterrent effect of delay in a review process running to 10 months). We note the Agency has delayed publication of economic research papers for 14 months and counting.

¹²⁴ *Freedman v. Maryland*, *supra*, 380 U.S. at 55, and 58-60.

¹²⁵ *Snepp v. United States*, 444 U.S. 507, 510 (1980) (“[E]ven in the absence of an express agreement – the CIA could have acted to protect substantial government interests by imposing reasonable restrictions on employee activities that in other contexts might be protected by the *First Amendment*”).

¹²⁶ *Id.*

¹²⁷ *Id.* at 511 n.8 (The Court noted that the employment contract at issue “requires no more than a clearance procedure subject to judicial review”).

¹²⁸ 56 Fed. Reg. 33778 (July 23, 1991).

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In response to comments made by four agencies and one organization, OGE has deleted proposed §2635.807(c) which stated that employees must comply with agency requirements for advance approval of the content of any speech, writing or similar product. Each of the commenters argued that the provision is overbroad and would violate the First Amendment. Consistent with our original intent, the final rule simply notes that some agencies may have policies requiring advance approval, review, or clearance of certain speeches or writings to determine whether they contain an appropriate disclaimer, disclose nonpublic information or otherwise comply with this part.¹²⁹

The OGE's final rule today contains this neutral statement:

Note: Some agencies may have policies requiring advance agency review, clearance, or approval of certain speeches, books, articles or similar products to determine whether the product contains an appropriate disclaimer, discloses nonpublic information, or otherwise complies with this section.¹³⁰

More recently, in 2008 the OGE issued advisory material on federal employee book publications and took a similarly neutral approach on required prior approval, merely stating:

Many agencies have supplemental regulations that require employees to obtain prior approval to engage in certain outside activities, including writing. Some of these agencies' supplemental regulations may contain other provisions related to writing.¹³¹

CFTC's supplemental standards of ethical conduct state that "Commission members and other employees are encouraged to engage in teaching, speaking, and writing activities."¹³² CFTC's supplemental standards do not require prior submission and approval of employee publications. CFTC's supplemental standards do require advance approval for outside employment, regardless of payment, but advance approval for outside employment only "includes writing when done under an arrangement with another person for production or publication of the written product." Moreover, the advance approval requirement "does not include participation in the activities of a nonprofit ... educational ... organization, unless such activities involve the provision of professional services or advice or are for compensation other than reimbursement of expenses." CFTC's regulations also provide: "[a] Commission employee or former employee shall not divulge, or cause or allow to be divulged, confidential or non-public

¹²⁹ 57 Fed. Reg. 35006 (Aug. 7, 1992).

¹³⁰ 5 CFR § 2635.807(b)(3) (note).

¹³¹ U.S. Office of Government Ethics, DO-08-006, Book Deal DABOgram, Part I: Regular Employees and SGEs, Paragraph VI. B. (March 6, 2008), available at <http://www.oge.gov/displaytemplates/mcsjakub.aspx?id=2147483821>.

¹³² 5 CFR § 5101.103(a).

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commercial, economic or official information to any unauthorized person, or release such information in advance of authorization for its release.”¹³³ The CFTC’s regulations do not specifically address the current processes for publications by OCE economists.

Regulations adopted by the Securities and Exchange Commission (SEC) require prior review of publications and speeches by employees, but includes a self-imposed deadline to answer the employee “as promptly as possible, with due regard to publication deadlines, but in any event within 30 days of receipt of the written document.”¹³⁴

Information Security Concerns are Agency-Wide

During our field work, OGC employees expressed concern that anyone with OCEnet access could download – to a privately owned thumb drive, disk, or external hard drive – any information from any network accessible on OCEnet, and remove it from the building. Data technology staff told us that it is possible that downloading information from OCEnet could be accomplished without creating any record of the download, depending on the relevant computer and network settings.¹³⁵ This of course would include sensitive information and information protected under Section 8. CFTC staff charged with responsibility for physical security in the CFTC workplace told us that, without thoroughly searching all employees as they leave the building, such removal of information would be impossible to prevent. Moreover, there was no way to tell what data the OCE economists had accessed through OCEnet, because no logs were kept of data transfers from the CFTC network to OCEnet. We agree that these are serious concerns.

Our interviews indicate that OCE economists believe it to be unlikely that data left the building, while information technology and security employees believe it possible that such misconduct occurred, due to the lack of controls, but are in disagreement regarding whether it is likely misconduct occurred. Forensic analysis appears at this time to be inconclusive due to the lack of controls. The absence of controls is key; the bottom line appears to be that it is most likely that CFTC will never know whether or not data protected under Section 8 left the building.

(b)(6),(b)(7)(C)

(b)(6),
(b)(7)
(C)

¹³³ 17 CFR § 140.735-5. No enforcement mechanism is provided. Separately, the Commodity Exchange Act makes it a felony to misuse any nonpublic Commission information which may affect or tend to affect the price of any commodity futures or commodity in connection with certain market transactions. 7 USC § 13(d).

¹³⁴ 17 CFR § 200.735-4(d)(2)(i). We offer no opinion on the SEC’s rule. The Court of Appeals for the District of Columbia Circuit in *Weaver* recognized the requirement for a prompt decision and judicial review in permissible prior restraint schemes (*Weaver*, *supra*, 87 F.3d at 1436), but also noted the lack of any “case holding that a review process—or indeed any form of prior restraint, even one including substantive prohibition of speech—in the context of an employment relationship is constitutionally invalid for want of a specific deadline on action.” *Id.* at 1443.

¹³⁵ In addition, staff remarked that information could also be printed out and removed from the building.

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(b)(6),(b)(7)(C)

CFTC management was also distressed that the badging process for outgoing OCE economists was not properly performed. We learned that the former Chief Economist had “extra” badges in his desk that had belonged to former OCE economists and had not been returned. CFTC management in OGC and Logistics and Operations surmise that these badges may have still worked, and may have been used to permit outside individuals to obtain access to CFTC headquarters offices.¹³⁷ CFTC management feared that unauthorized economists could use old badges to enter CFTC headquarters, and then have an existing OCE economist give them access to OCEnet (using their own usernames and network passwords), without detection. CFTC management also surmised that, prior to the installation of the welcome desk and badge readers in the lobby at CFTC headquarters, OCE economists could bring guests into the building without detection, with or without any badge for the guest. CFTC management seemed fairly convinced that improper access had occurred, although it appeared equally clear that no improper access had been documented.

For their part, the OCE economists we interviewed either stated that they had no way of knowing what other OCE economists were doing at headquarters with regard to possible impermissible guest access, or stated they did not believe that anyone had misused expired badges. None stated that they witnessed any improper access to information protected under Section 8 occurring within OCE. OCE economists told us that, when they were working with economists who were not CFTC employees, contractors, or consultants, they met off-site to discuss economic research projects.¹³⁸

CFTC's Remediation Efforts

Since December 2012, some progress has been made addressing the issues confronting OCE. OCE prepared a draft memorandum giving background on the work of OCE which was presented to the Division Directors and furnished to the Chairman.¹³⁹ The paper explains OCE's

¹³⁶ Removing confidential information from federal buildings can be a serious problem. In 1987, a secretary to Lt. Colonel Oliver North testified before Congress that she smuggled highly classified documents out of the Old Executive Office Building in her boots. Dan Morgan & Walter Pincus, *Half Testifies of Necessity “To Go Above Written Law.”* Wash. Post, June 10, 1987, at A1 (available at: <http://www.washingtonpost.com/wp-srv/local/nations/news/scandal/fawnhall.htm>). In any event, the level of intrusion that would be necessary to detect all instances of removal of confidential information from the federal workplace is extreme.

¹³⁷ We learned that, because CFTC retains badge access data for only 90 days, it will not be possible to determine whether defunct badges were used improperly after the departure date for the relevant employee, consultant, or contractor. CFTC retains guest logs for only 60 days.

¹³⁸ It is not uncommon for CFTC economists to work with non-CFTC economists to produce economic research papers. According to OCE economists, the contribution of the non-CFTC economist does not involve access to information protected under Section 8.

¹³⁹ OCE White Paper (draft), dated May 7, 2013.

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practice of hiring academic economists to research and publish academic articles on subjects of interest to the Commission. Efforts to re-establish OCEnet are ongoing; the relevant personnel in the Office of Data Technology drafted a plan during 2013 that would permit the OCE economists to return to the practice of conducting research on a standalone server. While this sounds hopeful, we understand that a restart for OCEnet has not yet moved forward. With regard to information security concerns, to our knowledge the Agency has not yet addressed the issue of information security for desktop computers Agency-wide, but is in the process.

As discussed above, improvements to badging and security clearance processes had been underway since 2011. CFTC employees working in Logistics and Operations told us that the recent improvements have resulted in greater controls over CFTC badges that will prevent the potential for misuse of defunct badges in the future. The new badges may be terminated remotely, and can be programmed to expire on an employee's, consultant's, or contractor's last day at CFTC. Moreover, the recent installation of card readers in the lobby at CFTC headquarters along with a manned front desk decrease the likelihood of unauthorized visitors, including visitors improperly using someone else's badge.

Human Resources, the Office of Data and Technology, and the Office of Security and Emergency Management have coordinated with OCE to analyze the existing processes for hiring and retaining academics and to plan improvements. OCE has lost staff and has not been permitted to bring on unpaid interns and consultants, but on December 5, 2013, CFTC posted four economists positions in OCE. We view this as a positive development.

As previously stated, in February 2013, the Chairman's Office and Office of General Counsel formed a committee – consisting primarily of subject-matter experts from OCE and DMO – to review for possible violations of Section 8 and other nondisclosure provisions all 24 research papers that were pending publication as of December of 2012. We understand that the Chief Economist furnished the committee with the text of Section 8 and other relevant provisions. The Committee has not been given written guidance by OGC on the standards to be applied with regard to the identification of information protected under Section 8 (including acceptable aggregation policies) and regarding the identification of trade secrets.

The Committee is drawing on substantial expertise within the Agency to review the papers. In consultation with the authors, the Committee is performing the following tasks:¹⁴⁶

1. Please identify the CFTC data and information used to produce the paper. Please provide detailed information about the source of the data (ISS, TSS, Special Calls, other sources including DOE, DSIO, DMO, and other CFTC records), the market sector(s), any date restrictions, and which specific data fields were reviewed (account numbers, specific trade information, etc.)

¹⁴⁶ The Deputy General Counsel for (b)(6),(b)(7)(C) sent these questions to OCE and the Chief Operating Officer on February 13, 2013.

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2. Please describe how the data used was aggregated, masked and/or anonymized so that it does not separately disclose the business transactions or market positions of any persons and trade secrets or names of customers.
3. Please describe any baseline of aggregation number(s) identified as sufficient for anonymization and the justification for the baseline of aggregation.
4. Please identify if any of the CFTC data and information used to produce the paper was shared with non-CFTC affiliated individual(s) or organization(s)? If so, please describe the steps that were taken to ensure that it was appropriately aggregated, masked and/or anonymized. If the CFTC data and information used to produce the paper was shared and was not aggregated, masked and/or anonymized, then please describe the steps taken to protect the CFTC data and information from further dissemination or use.
5. Please describe the internal OCE review process for the paper. Please discuss whether the review considered if charts, graphs, algorithms, formulas, and other analysis in the paper could be reverse engineered to separately disclose the business transactions or market positions of any persons and trade secrets or names of customers. Please describe the basis for clearance.
6. Please identify the CFTC staff, contractors and consultants involved in any reviews of the paper or the CFTC data and information used to produce the paper.

In addition, the Committee, in consultation with the authors, answers the following questions:¹⁴¹

1. For each author, identify the affiliation with the CFTC during the production of this paper and during any period of contact with CFTC data.
2. Identify any division of labor or specialization among authors utilized to prevent unauthorized access to CFTC data by co-authors or assistants not affiliated with the CFTC.
3. Identify any aggregation, masking, or other anonymization techniques utilized to prevent unauthorized access to CFTC data.
4. Identify any other steps taken during the production of the paper to prevent access to CFTC data by unauthorized persons. For example, describe how data was protected if a co-author became unaffiliated with the CFTC after previously being affiliated with the CFTC.

If a paper is approved by the Committee, the next step is review by the Office of General Counsel. Staff in the Office of General Counsel state that their review is not intended to second

¹⁴¹ This checklist was created by the Acting Chief Economist in June 2013.

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guess the determination of the Committee regarding adequacy of aggregation or disclosure of trade data. Instead, the Office of General Counsel reviews the work of the Committee to assure that it has considered the trade data and presented its analysis clearly.

The Committee has sent some papers back to authors with questions. In our fieldwork, OCE economists described these inquiries as requests for clarification as opposed to requests to change the substance of a discussion. OCE economists affected by these suggestions who spoke with us voiced no complaints or misgivings regarding the level of inquiry.

All witnesses with an opinion told us that the Committee has not identified any violations of Section 8 among the papers reviewed thus far. As of December 9, 2013, the committee had approved ten papers; three were approved in June 2013, the others were approved thereafter. On October 23, 2013, the assigned Deputy General Counsel permitted three papers to be published. These three papers discussed economic theory without reference to information protected under Section 8, not even in aggregated form. We are puzzled why such seemingly simple papers required 10 months of review. OGC cleared four additional papers for publication in February 2014.¹⁴²

Conclusions and Recommendations

After the receipt of one complaint regarding OCE economic research papers and a two-day internal review, the Office of the General Counsel in consultation with the Office of the Chairman indefinitely suspended OCE publication and presentation activities. The Agency thereafter shut down OCE's dedicated server, and issued stop work orders for all contractors and terminated most OCE consultants. The motivations for the decision to prohibit publication and presentation of completed economic research were: 1) administrative flaws in on-boarding paperwork for OCE economists; 2) concerns regarding the existing review and clearance process for OCE papers; and 3) physical and information technology security concerns.

We agree that the physical and information technology concerns exist; however, they are Agency-wide, and are currently being addressed at least in part in connection with an OIG audit of CFTC's Fiscal Year 2013 implementation of the Federal Information Security Management Act.¹⁴³ The absence of controls is significant; lacking a reliable way to determine whether confidential information was improperly taken from the CFTC, we will not jump to the conclusion that misconduct did or did not occur based on contradictory opinions of Agency employees. We can make no finding.

While continuing the indefinite suspension of OCE publication and presentation activities, the Agency formed a Committee to review proposed academic research papers. By June 2013 the committee had approved three papers for publication, and by December 2013 had approved seven additional papers. Throughout this process, the Committee found no violations

¹⁴² See Appendix 5.

¹⁴³ Pub. L. No. 107-347, Title III, 116 Stat. 2899 (Dec. 17, 2002).

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of Section 8 among any research article it reviewed, though it did recommend alterations that it described as clarifying. During our field work, we repeatedly advised Agency management to restart the OCE research program, and encouraged them to speed up the process for permitting the publication of OCE research articles. In October 2013, the assigned Deputy General Counsel gave final approval for three papers to be published. OGC approved four additional papers for publication in February 2014 (as of February 20).¹⁴⁴

We appreciate the gravity of the concerns that motivated the OCE shutdown, including the Commission's substantial interest in protecting confidential information from illegal disclosure; however, we nevertheless believe that in shutting down all server-assisted research and all publication by OCE economists for the length of time that it has, Agency management has risked violating Section 18 of the Commodity Exchange Act, especially given the long tradition of describing the research program as fulfilling a mandate.¹⁴⁵ We recommend that the Agency remain mindful of the requirements of Section 18.

We do not agree that issues with administrative on-boarding documentation and security clearances present a bar to the performance of duties for any CFTC employee who is otherwise properly appointed. We believe the Agency did not act in accordance with Comptroller General opinions addressing analogous situations in the federal workplace, and apparently treated OCE economists differently than other Agency employees with similar administrative deficiencies (and treated at least one OCE employee with an administrative on-boarding error differently than the others).¹⁴⁶ We recommend that the Agency remain mindful of the general rule that acts performed while a person is serving in a *de facto* status are generally as valid and effectual as those of an officer *de jure*, and that the Agency has every authority to ratify the acts of employees who are working in good faith albeit with administrative deficiencies in their personnel records. We recommend that the Agency take action to remedy administrative errors in on-boarding documentation Agency-wide without disturbing employee work activities whenever possible.

We agree that the Agency may assign research topics to OCE economists, and we find support for the Agency's authority to require OCE economists to submit their written research papers and presentations to the Agency prior to publication. We agree with Commission management and staff that any evaluation of economic research papers for possible impermissible disclosures of information protected under Section 8 in many instances may not be easy. We understand Agency management's desire to determine whether aggregated trade data in an economic research paper may be combined with other publicly available data and reverse engineered to permit the reader to ascertain the identity of the trader. The process to determine whether a trade secret has been disclosed may be similarly complex in many instances. Given these complexities, and the gravity of being accused of violative conduct, we are not surprised that for more than twenty years, OCE economists have voluntarily submitted their research papers to the Chief

¹⁴⁴ See Appendix 5.

¹⁴⁵ See fn.47 and accompanying text.

¹⁴⁶ See fn.99.

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Economist for review prior to publication, and have acquiesced to further review by OGC and DMO staff as recommended by the Chief Economist.

While we are sensitive to these important concerns, and understand the Agency's desire to avoid illegal disclosures in Agency-sponsored research, we cannot find support in the law for the Agency's new system, which bars all publication and presentation of economic research papers published with a disclaimer until approved by a Committee and by OGC over a period that can last more than 14 months.¹⁴⁷ It appears that the OCE economists have not been furnished narrow, objective, and definite standards for the evaluation of their independent research papers, and this is disturbing, as it seems unworkable to expect scholars to conform their independent research papers and presentations to disclosure standards that are not clearly defined at the outset. It does not appear that the current system provides for prompt judicial review. We cannot emphasize enough that the current process is taking, in our view, far too long.

We recommend that the Agency assure the legality of any mandatory prior review process for employee publications, keeping in mind both that "any system of prior restraints of expression comes to [] Court bearing a heavy presumption against its constitutional validity,"¹⁴⁸ and that "a free society prefers to punish the few who abuse rights of speech *after* they break the law than to throttle them and all others beforehand. . . ."¹⁴⁹ We caution the Agency to remain mindful that "dissemination delayed may prove tantamount to dissemination denied."¹⁵⁰

Our inability to find legal precedent to support the Agency's current review process is unfortunate given the Agency's legitimate concerns; however, we do not seek to reduce this matter to a mere legal issue. Even if the Agency identifies precedent to support the current review process, we recommend the Agency remain aware of the adage, "just because it's legal, doesn't make it right." It is the length of time involved that is the greatest concern.

We therefore recommend that the Agency restart the OCE research program, including OCEnet (or comparable research capacity), as soon as feasible. We of course agree that improvement to all related processes and controls should continue; however, in the absence of any findings (by the Agency or its OIG) of violative disclosures by OCE economists, we believe there is no reason to halt economic research and publication. We recommend that any review process for OCE research papers and presentations undertaken by the Agency be prompt. Any delay in publication risks diminishment of the research's relevance and of its usefulness to Congress and the public. Moreover, it

¹⁴⁷ At the end of the review process, OGC staff issues a memo with language such as: "OCG concurs with the conclusion of the Paper Review Committee and clears this paper for publication subject to the use of the disclaimer provided below." See Appendix 5 (OGC review memos for four OCE economic research papers).

¹⁴⁸ *Bantam Books, Inc. v. Sullivan*, *supra*, 372 US at 70.

¹⁴⁹ *Southeastern Promotions, Ltd. v. Conrad*, 420 U.S. 546, 559 (1975).

¹⁵⁰ Laurence H. Tribe, *American Constitutional Law* 1042 (2d ed. 1988) (quoted in *Harman*, 140 F.3d at 120).

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provides a strong disincentive for economic research scholars to apply to CFTC for research opportunities.

Finally, we stress the importance of economic research at the CFTC, an economic regulatory agency. For over 35 years OCE has attracted some of the highest qualified economists in the country among both its full-time staff and its limited term appointments. The quality of research economists attracted to the CFTC has resulted from the quality of information available at the Commission coupled with the high level of analytical support for research publications and presentations that permanent OCE staff have historically offered visiting scholars.

We believe the current prohibition against publishing coupled with the lengthy delays in the new pre-publication review process has hampered the OCE research program, at least temporarily, and has potentially damaged academic careers.¹⁵¹ It has halted the dissemination of economic research to Congress and to the public.¹⁵² It has endangered the Agency's ability to attract the high quality of economic research historically achieved at this Agency. In order to continue to attract outstanding scholars, the Commission must support the goals of economic research coupled with academic integrity, and must make any pre-clearance process (whether voluntary or mandatory) a priority in terms of both legality and speed.

¹⁵¹ We understand that economic research papers currently under review in connection with academic juries and PhD programs were recalled pending the outcome of the required Committee and OGC review process. In addition, Agency management sought the removal of one economic research paper from the Internet prior to receipt of the complaint from CME. See fn.12.

¹⁵² However, it seems that some OCE economists are disregarding the Agency's prohibition in any event. It appears that (b)(6), (b)(7)(C) presented the same paper that gave rise to the events discussed in this review at the

(b)(6), (b)(7)(C) with the paper available and linked with the workshop's program (b)(6), (b)(7)(C)

(b)(6), (b)(7)(C) Similarly, it appears that (b)(6), (b)(7)(C) presented his paper titled (b)(6), (b)(7)(C) earlier this year (b)(6), (b)(7)(C)

His paper is not available online with the workshop program; however, it may be requested separately from the program administrator (b)(6), (b)(7)(C) (b)(6), (b)(7)(C)

published a separate paper on (b)(6), (b)(7)(C) (b)(6), (b)(7)(C)

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APPENDICES

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Appendix 002
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Appendix 1 – The CME Letter

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 MICHIGAN
 PARIS
 RIO DE JANEIRO
 SINGAPORE
 SINGAPORE
 TOKYO
 TORONTO
 VIENNA

December 14, 2012

"I thank [redacted] Andrei Karilenko, [redacted]
[redacted] for their assistance with the empirical component of this paper, and I thank [redacted]
[redacted] for their invaluable advice and comments.

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It appears that the Commission's Chief Economist has both used Section 8 data and provided access to Section 8 data to non-CFTC economists and their assistants for purposes of published academic research in violation of Section 8. We appreciate that your Office is looking into this situation.

In order to avoid any doubt, we have listed below the issues that we believe are raised by this conduct.

1. Has the Commission authorized its Chief Economist to use Section 8 data for purposes of his academic research? Is the choice of research topic reviewed in advance by any officer of the Commission? If so, which officer? Are the Commissioners given any advance notice that the research is being conducted? Are the Commissioners required to give formal approval before the research is published?
2. If the Commission has authorized its Chief Economist to use Section 8 data for purposes of his academic research, what is the statutory or other legal basis for that authorization?
3. What system of supervision is in place to review any such research before publication, and what was done in the cases referenced above? Who approved the publication of Dr. Kirilenko's research? Who approved the selection of individuals to whom the data was provided? In what form was the data provided? What specific data elements were provided? What safeguards were employed to protect the data that was exposed to non-Commission employees? Did Dr. Kirilenko or anyone else at the CFTC utilize data aliasing mechanisms to protect identifying data elements? What data is allowed to leave CFTC premises? If so, what was done to protect that data after it leaves the premises? Is the data provided to third parties reviewing the research as part of a peer review process? What processes are in place to provide assurance that all data provided to third parties is returned to the CFTC and is not used by third parties for any reason not authorized by the CFTC?
4. Absent specific Commission authorization, does the Chief Economist have authority to use Section 8 data for purposes of his academic research?
5. Has the Commission or the Chief Economist authorized non-Commission employees, including "academics" or their assistants, to have access to Section 8 data for any purpose?
6. If so, for what purpose, subject to what limitations and protections and under what legal authority?
7. If the Commission or its Chief Economist provides Section 8 data to non-Commission employee "academics," how does the Commission select which non-Commission employee "academics" to favor with Section 8 data for their private research?

As you might expect, a number of customers of our client CME Group, Inc. have expressed their concern that Section 8 data has been shared with non-Commission employees engaged in academic research. CME provides that data to the Commission and its staff

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Dan M. Berkovitz, Esq.
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routinely because the Commission requires the CME to do so for the Commission's regulatory purposes. Market participants world-wide expect the integrity and confidentiality of all Section 8 data to be maintained. Any misuse of Section 8 data, we know, would be considered a serious violation of law by the CME and its customers and, we believe, the Commission itself.

We look forward to discussing these matters further with you upon the completion of your inquiry.

Sincerely,



Mark D. Young



Jerrold E. Salzman

U.S. Commodity Futures Trading Commission
Office of the Inspector General

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Appendix 2 – The Chairman’s Letter

U.S. Commodity Futures Trading Commission
Office of the Inspector General

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U.S. COMMODITY FUTURES TRADING COMMISSION
Three Lafayette Centre
1155 21st Street, NW, Washington, DC 20581
Telephone: (202) 418-6000
Facsimile: (202) 418-6621
www.cftc.gov

Office of the
Chairman

January 24, 2013

VIA HAND DELIVERY

Roy A. Levik
Inspector General
U.S. Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

Re: OCE Research Program

Dear Roy,

I am writing to follow-up on my staff's communication with your office on December 11, 2012, regarding matters relating to research conducted or supported by the Office of Chief Economist ("OCE") within the Commodity Futures Trading Commission ("CFTC"). The OCE economic research program focuses on the quantitative analysis of changes in trading technology, trading instruments, and types of market participants, and makes the results of its research available to the public. Review of the OCE research program to-date indicates that there are issues regarding the use of non-public data by the OCE and visiting academics. Additionally, there appear to be issues regarding the manner in which academic consultants and contractors were brought into the agency, their status with respect to the agency, their access to CFTC systems and information, and the adequacy of related documentation. I believe all of these issues warrant your review.

Separately, as further described below, I have directed the CFTC staff to suspend the external publication of research conducted or supported by OCE, and to terminate access to non-public data by OCE personnel other than CFTC full-time employees within OCE. I have also directed the CFTC staff to recommend or implement, as appropriate, corrective measures or programmatic improvements that may be warranted. Our review of this matter is ongoing.

On December 5, 2012, counsel for an outside person contacted the CFTC's General Counsel and raised questions concerning research based upon CFTC non-public data. In this and in subsequent communications, the person raised questions regarding the use of non-public CFTC data in publicly available research papers, the authority of OCE employees and others to conduct such research, and the types of controls the CFTC has regarding access to, use or release of data that is protected from release under Section 8 of the Commodity Exchange Act.

U.S. Commodity Futures Trading Commission
Office of the Inspector General

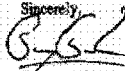
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January 24, 2013
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At my direction, the Office of General Counsel ("OGC") immediately began to look into these matters. On December 7, 2012, after OGC's initial review of the conduct of OCE-supported research activities identified deficiencies in documentation, OGC, in consultation with my office, directed the Chief Economist to insure that all OCE employees, consultants, and contractors cease sharing, publishing, distributing, or otherwise making available any papers or other products generated with Commission data to any non-Commission individuals or parties. The Chief Economist immediately issued this suspension. Also at my direction, on Tuesday, December 11, 2012, Eric Juzenas, the Chief Operating Officer, informed your office of the concerns that had been raised regarding OCE-supported research and that there were possible issues that the agency was reviewing. On December 12, the CFTC terminated access to the agency systems and databases, including a stand-alone system called OCEnet, of all individuals within the OCE research program other than full-time agency employees within OCE. Following these actions, the CFTC staff has been reviewing the human resources, procurement, logistics, data, and legal issues raised by the OCE research program and will take any further steps that we deem appropriate.

CFTC staff and I are available at your convenience to brief you or your staff in more detail on these issues and our review to date. If you have any questions, please do not hesitate to contact Mr. Juzenas.

Thank you for your attention to this matter.

Sincerely,

Gary Gensler

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Office of the Inspector General

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Appendix 3 – December 7, 2012 email

U.S. Commodity Futures Trading Commission
Office of the Inspector General

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From: (b)(6),(b)(7) [Deputy General Counsel]

Sent: Friday, December 07, 2012 06:22 PM

To: Kirilenko, Andrei

Cc: Juzenas, Eric; Berkovitz, Dan M; Thompson, Anthony C.; (b)(6),(b)(7)(C)

Subject: Follow Up on OCE Review Discussion

Andrei – Thank you for meeting with us today. As you know, the Commission was notified about the potential disclosure of protected, confidential or non-public, economic or official Commission information in a paper produced by an unpaid consultant in the Office of the Chief Economist. We are currently reviewing the Commission information referenced and used for compliance with section 8(a) of the Commodity Exchange Act, Commission regulations on the disclosure of information, and the terms of any applicable Non-Disclosure Agreements.

As we discussed, throughout the duration of the review, please direct all of your staff (including employees, consultants (both paid and unpaid), and contractors) in the Office of the Chief Economist to immediately cease sharing, publishing, distributing, or otherwise making available any papers or other products generated with Commission data to any non-Commission individuals or parties. Additionally, please remind your staff that they are prohibited from discussing or otherwise disclosing any Commission information that that they have received in the course of their work for or engagement with the Commission to non-Commission individuals or parties. See 17 C.F.R. § 140.735-5.

We ask that you please document these instructions to your staff in writing and provide confirmation to us once you have completed notifying all of your staff.

If you have questions about the review or this e-mail, please do not hesitate to contact me. Thank you.

(b)(6),(b)(7) [Deputy General Counsel]

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Office of the Inspector General

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Appendix 4 – A Partial List of Economic Research Papers

U.S. Commodity Futures Trading Commission
Office of the Inspector General

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Publication year	Journal	Title
1976	American Journal of Agricultural Economics	Food policy: implications for the food industry
1977	American Journal of Agricultural Economics	Commodity futures exchanges and the north-south dialogue
1977	Western Journal of Agricultural Economics	Government Regulation and the Futures Markets
1978	International Organization	Food Markets and their Regulation
1979	American Journal of Agricultural Economics	A regulator's perspective on regulatory research
1980	American Journal of Agricultural Economics	Futures Markets: The Interaction of Economic Analyses and Regulation: Discussion
1981	Financial Analysts Journal	A Comparison of Options and Futures in the Management of Portfolio Risk
1982	Financial Analysts Journal	A Comparison of Margin Requirements for Options and Futures
1984	Review of Futures Markets	Regulation of Futures Markets: Theory and Practice
1985	American Journal of Agricultural Economics	Market regulation and international use of futures markets
1985	Journal of Futures Markets	Futures trading and the price volatility of GNMA certificates - further evidence
1986	American Journal of Agricultural Economics	Cross-compliance for erosion control: anticipating efficiency and distributive impacts: comment
1986	Journal of Futures Markets	Insider trading in futures markets: a discussion
1987	American Journal of Agricultural Economics	Expectations and commodity price dynamics: the overshooting model: comment

U.S. Commodity Futures Trading Commission
Office of the Inspector General

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Publication year	Journal	Title
1987	Economic Affairs	Regulating financial services: how severe are the dangers?
1987	Financial Analysts Journal	Stock Index Futures: does the dog wag the tail?
1987	Journal of Futures Markets	Factors affecting agricultural futures price variance
1987	Journal of Futures Markets	Transactions data tests of the black model for soybean futures options
1987	Journal of Futures Markets	An analysis of cash and futures prices in the delivery period of maturing contracts in the coffee "c" market, 1972-1981
1988	Financial Analysts Journal	Stock index futures and stock market activity in October 1987
1988	Journal of Futures Markets	A note: do futures prices always reflect the cheapest deliverable grade of the commodity
1988	Journal of Futures Markets	Optimal exercise of the switching option in treasury bond arbitrages
1988	Review of Futures Markets	The Intradaily Variability of Soybean Futures Prices: Information and Trading Effects
1989	Book: Research in Financial Services: Private and Public Policy	Thrift - Institution Failures: Estimating the Regulator's Closure Rule
1989	Book: Stock Market: Bubbles, Volatility and Chaos	Statistical Analysis of Price and Basis Behavior: October 12-26, 1987 S&P 500 Futures and Cash
1990	Book: Advances in Futures and Options Research	Empirical Analysis of the Liquidity of The S&P 500 Index Futures Market During the October 1987 Market Break

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Publication year	Journal	Title
1990	Journal of Applied Corporate Finance	The new regulation of hybrid debt instruments
1990	Journal of Finance	Initial public offerings and underwriter reputation
1991	Financial Management	Share repurchase mechanisms: a comparative analysis of efficacy, shareholder wealth, and corporate control effects
1991	Journal of Real Estate Finance and Economics	Temporal Relationships Among Adjustable Rate Mortgage Indexes
1991	Review of Futures Markets	On the Existence of an Optimal Tick Size
1991	Review of Futures Markets	Do Circuit Breakers Moderate Volatility? Evidence from October 1989
1991	Review of Futures Markets	Who Owns the Quotes? A Case Study into the Definition and Enforcement of Property Rights at the Chicago Board of Trade
1991	Western Journal of Agricultural Economics	Impact of Cash Settlement on Feeder Cattle Basis
1992	Journal of Banking & Finance	Tests of the nominal contracting hypothesis using stocks and bonds of the same firms
1992	Journal of Futures Markets	The effects of amendments to rule 80a on liquidity, volatility, and price efficiency in the S&P 500 futures
1992	Journal of Real Estate Finance and Economics	Determinants of the ARM Share of National and Regional Lending
1992	Real Estate Economics	Seasonal variation in cost of funds at thrift institutions
1993	Journal of Applied Econometrics	Intra-day futures price volatility: information effects and variance persistence

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Publication year	Journal	Title
1993	Journal of Business	Tests of Unbiasedness in the Foreign Exchange Futures Markets: an Examination of Price Limits and Conditional Heteroscedasticity
1994	Business Lawyer	Using Finance Theory to Measure Damages in Cases Involving Fraudulent Trade Allocation Schemes
1994	Journal of Derivatives	Market Maker Competition on Futures Exchanges
1994	Journal of Derivatives	The Exercise of Equity Options: Theory and Empirical Tests
1994	Journal of Futures Markets	An Intraday Analysis of Bid-Ask Spreads and Price Volatility in the S&P 500 Index Futures Market
1994	Journal of Futures Markets	A Time Series Approach to Testing Market Linkage: Unit Root and Cointegration Tests
1994	Journal of Law and Economics	Residual Claims in Bankruptcy
1994	Management Science	An analysis of the risk in discretely rebalanced option hedges and delta-based techniques
1995	Journal of Futures Markets	The Failure of the Mortgage-Backed Futures Contract
1995	Journal of Business	Standard & poor's 500 index futures volatility and price changes around the New York Stock Exchange close
1996	Journal of Financial Intermediation	The performance and market impact of dual trading: CME rule 552
1996	Journal of Futures Markets	Market making with price limits
1996	Review of Financial Studies	Index arbitrage and nonlinear dynamics between the S&P500 futures and cash

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Publication year	Journal	Title
1997	Journal of Futures Markets	Crop year influences and variability of the agricultural futures spreads
1997	Journal of Futures Markets	Futures market transaction costs
1998	Journal of Futures Markets	Trading volume and transaction costs in futures markets
1999	Journal of Banking & Finance	Maturity structure of public debt and expected bond returns
1999	Journal of Financial and Quantitative Analysis	Market liquidity and trader welfare in multiple dealer markets: evidence from dual trading restrictions
1999	Journal of Futures Markets	Modeling nonlinear dynamics of daily futures price changes
1999	Journal of Statistical Computation and Simulation	A Monte Carlo Investigation of The BDS Statistic
1999	Review of Futures Markets	Do Professional Traders Exhibit Loss Realization Aversion?
2000	Journal of Financial Services Research	A Test of Integration and Cointegration of Commercial Mortgage Rates
2000	Journal of Futures Markets	Examining futures price changes and volatility on the trading day after a limit-lock day
2000	Journal of Futures Markets	Trading volume, bid-ask spread, and price volatility in futures markets
2003	Review of Quantitative Finance and Accounting	The Split of the S&P 500 Futures Contract: Effects on Liquidity and Market Dynamics
2004	Futures Industry	Do Block trades Harm Markets?
2004	Journal of Business	Causality and Price Discovery: An Application of Directed Acyclic Graphs

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Publication year	Journal	Title
2004	Journal of Futures Markets	Contract modifications and the basis behavior of live cattle futures
2004	RAND Journal of Economics	Patterns of retail price variation
2004	Southern Economic Journal	Integration and causality in international freight markets modeling with error correction and directed acyclic graphs
2004	Journal of Consumer Policy	How Retailers Select Products to Go on Sale: Evidence from Store-Level Data
2005	Journal of Finance	Do professional traders exhibit myopic loss aversion? An experimental analysis
2005	Journal of Financial Research	Estimating the value of delivery options in futures contracts
2005	Journal of Forecasting	Conditional volatility forecasting in a dynamic hedging model
2005	Journal of Futures Markets	Asymmetric volatility of basis and the theory of storage
2005	Journal of Futures Markets	Information transmission in electronic versus open-outcry trading systems: an analysis of U.S. equity index futures markets
2005	Journal of Futures Markets	Derivative pricing model and time-series approaches to hedging: a comparison
2005	Journal of Public Economics	Credible assignments can improve efficiency in laboratory public goods games
2005	Proceedings of the National Academy of Sciences of the United States of America	A Simple Test of Expected Utility Theory Using Professional Traders

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Publication year	Journal	Title
2005	Review of Futures Markets	When Contract Size Matters: The Case of Equity Index Futures
2005	Review of Futures Markets	Liquidity and Price Discovery on Floor versus Screen-Based Trading Systems: An Analysis of Foreign Exchange Futures Markets
2005	Review of Economics and Statistics	Generic drug industry dynamics
2006	Journal of Futures Markets	Causality in futures markets
2006	Journal of Futures Markets	Transaction tax and market quality of the Taiwan stock index futures
2007	Journal of Alternative Investments	Hedge Funds, Volatility, and Liquidity Provision in Energy Futures Markets
2007	Journal of Finance	Information Cascades: Evidence from a Field Experiment with Financial Market Professionals
2007	Journal of Industrial Economics	The effect of group size and asymmetries on the incentive to reveal group-specific information
2007	Managerial and Decision Economics	"Branded Generics" as a strategy to limit cannibalization of pharmaceutical markets
2007	Berkeley Electronic Journal of Theoretical Economics	Pricing behavior of Multi-Product Retailers
2007	Book: European Pharmaceutical Policy and the Global Market	Competition in Generic Drugs: The American Experience and Lessons for Europe
2009	Book: Finance et Valeurs	The Changing Structure of Energy Futures Markets

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Publication year	Journal	Title
2009	Book: Financial Derivatives: Pricing and Risk Management	Clearing and Settlement
2009	Book: Financial Derivatives: Pricing and Risk Management	The development and current state of derivatives markets
2009	Book: Financial Derivatives: Pricing and Risk Management	Speculation and hedging
2009	Book: Financial Derivatives: Pricing and Risk Management	Equity derivatives
2009	Book: Financial Derivatives: Pricing and Risk Management	The regulation of U.S. commodity futures and options
2009	Journal of Futures Markets	Reversing the lead or a series of unfortunate events? NYMEX, ICE, and Amaranth
2010	Journal of Alternative Investments	Commodities and Equities: Ever a "Market of One"?
2010	Journal of Futures Markets	Why do expiring futures and cash prices diverge for grain markets?
2010	Aestimatio	The Puzzle of Privately Imposed Price Limits: Are the Limits Imposed by Financial Exchanges Effective?
2011	Journal of Futures Markets	Demutualization and customer protection at self-regulatory financial exchanges
2011	Journal of Alternative Investments	The Role of Speculators During Times of Financial Distress

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Publication year	Journal	Title
2012	Journal of Policy Modeling	New regulatory authority over significant price discovery contracts: An example of natural gas swaps with econometric applications
2013	Book: Handbook on Systemic Risk	Strategic Interactions of Financial Networks for the Analysis of Systemic Risk

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Appendix 5 – OGC Review Memos for Four OCE Economic Research Papers

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Paper #3 (b)(6),(b)(7)(C)

(b)(6),(b)(7)(C) and Andrei Kirilenko

by (b)(6),(b)(7)(C)

The Office of the General Counsel has completed its review of Paper #3. Our review included an evaluation of the findings of OCE Paper Review Committee, review for compliance with the Standards of Ethical Conduct for Employees of the Executive Branch, review for compliance with contracting requirements under the Federal Acquisition Regulations, and an analysis of whether the paper fits within the permitted research activities set forth in 7 U.S.C. § 22. (b)(6),(b)(7)(C) Economist in the Office of Chief Economist, has confirmed for us that the writing of this paper was undertaken as one of the permitted research activities set forth in Section 18 of the Commodity Exchange Act (CEA), codified at 7 U.S.C. § 22, to assist CFTC in the development of educational and other informational materials regarding futures trading among producers, market users and the general public and to carry out the general purposes of the Commodity Exchange Act, as amended. In particular, (b)(6),(b)(7)(C) has noted that the research fosters the public interest by providing insight into the price discovery mechanisms of markets and investigating the impacts of technology and the interaction of different trader types on the dynamics of the price process. Additionally, (b)(6),(b)(7)(C) further explained that research on price discovery is relevant to the Commission's interest in fostering transparency in the futures and swaps markets and the paper includes specific results that have a direct bearing on price discovery role of the centralized market of DCMs.

According to information provided by the Office of the Executive Director and the Procurement Office, two of the three authors were contractors and they received compensation from the CFTC for the research and production of the paper. CFTC contractor (b)(6),(b)(7)(C) worked under contracts (b)(6),(b)(7)(C) and (b)(6),(b)(7)(C) and received compensation from the CFTC for the research and production of the paper. CFTC Contractor (b)(6),(b)(7)(C) performed work under two contracts, one in (b)(6),(b)(7)(C) and one in (b)(6),(b)(7)(C). In both cases, (b)(6),(b)(7)(C) received compensation from the CFTC for the research and production of the paper.

The third author, former CFTC employee Andrei Kirilenko wrote this paper as part of his official duties. As a federal employee, Mr. Kirilenko was subject to the federal ethics regulations and other agency-specific and government wide laws and regulations for federal employees. OCE has confirmed that Mr. Kirilenko produced this paper in his official capacity within the scope of his duties. In addition, he received no additional compensation for this paper from sources outside the government.

This paper was cleared by the Paper Review Committee for publication based on a review of the paper itself, a review of information provided by the authors and the committee's conclusion that "release of the paper did not present a significant disclosure risk" of information protected by Section 8 of the CEA, codified at 7 U.S.C. § 12. More specifically, the Paper Review Committee has informed OGC that "the paper utilizes confidential CFTC data but aggregates the data to present results that do not present an unacceptable risk of disclosure." During the Paper Review Committee's examination of this paper in the summer of 2013, the Committee conducted a detailed review of the paper including all tables. The Paper Review Committee noted "Reading the entirety of the paper, the Committee concluded that the number of HFTs [High Frequency Traders] examined does not fall to a level that presented substantial disclosure risk." The Paper Review Committee also noted that "the information about the participants in the market did not represent an inappropriate disclosure, but rather provided useful information that did not reveal confidential information. This is especially true, given that the conclusions relate to the HFT industry, rather than to any particular HFT firm." Aside from their analysis of the conclusions in the paper, the Paper Review Committee also considered whether information protected by Section 8 of the CEA is disclosed within the tables contained in the paper. For example with regard to Table 3 in the paper, the

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Paper Review Committee noted "... this information was aggregated over a particular (one month) time interval, and that the cells were constructed using data from many firms and pair wise groupings. As noted before, each firm type (aggressive HFTs, passive HFTs and mixed HFTs) is an aggregate of many firms." The Paper Review Committee went on to conclude that the data in Table 3 provided "no significant disclosure risk." Consequently, OGC concurs with the conclusions of the Paper Review Committee that there is no significant risk of disclosure of Section 8 data relating to the release of this paper.

Aside from the determination relating to Section 8, the paper is considered a government work product and may not be individually copyrighted by the authors. OGC concurs with the conclusion of the Paper Review Committee and clears this paper for publication subject to the use of the disclaimer provided below.

The following disclaimer must be used:

The research presented in this paper was co-authored by (b)(6),(b)(7)(C) a former CFTC contractor who performed work under contracts (b)(6),(b)(7)(C) and (b)(6),(b)(7)(C) and (b)(6),(b)(7)(C) a former CFTC contractor who performed work under contracts (b)(6),(b)(7)(C) and (b)(6),(b)(7)(C). (b) Andrei Kirilenko, former CFTC Chief Economist, was also a co-author who wrote this paper in his official capacity with the CFTC. The Office of the Chief Economist and CFTC economists produce original research on a broad range of topics relevant to the CFTC's mandate to regulate commodity future markets, commodity options markets, and the expanded mandate to regulate the swaps markets pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act. These papers are often presented at conferences and many of these papers are later published by peer-review and other scholarly outlets. The analyses and conclusions expressed in this paper are those of the authors and do not reflect the views of other members of the Office of Chief Economist, other Commission staff, or the Commission itself.

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Office of the Inspector General

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Paper #10

(b)(6), (b)(7)(C)

by (b)(6), (b)(7)(C)

The Office of the General Counsel has completed its review of Paper #10. Our review included an evaluation of the findings of the OCE Paper Review Committee, review for compliance with the Standards of Ethical Conduct for Employees of the Executive Branch, review for compliance with contracting requirements under the Federal Acquisition Regulations, and an analysis of whether the paper fits within the permitted research activities set forth in 7 U.S.C. § 22. (b)(6), (b)(7)(C)

Economist in the Office of the Chief Economist, has confirmed for us that the writing of this paper was undertaken as one of the permitted research activities set forth in Section 18 of the Commodity Exchange Act ("CEA"), codified at 7 U.S.C. § 22, in the development of educational and other informational materials regarding futures trading among producers, market users and the general public and to carry out the general purposes of the Commodity Exchange Act, as amended. In particular, (b)(6), (b) has noted that the research fosters the public interest by providing insight into the behavior of potentially large, potentially correlated actors in futures markets: central banks. Specifically, the growth of central bank reserve assets and the active use of central banks in listed and over-the-counter derivatives markets represents a significant occurrence in futures markets trading, and the impact is not well understood. This research examines the magnitude of trading by central banks and whether activity across central banks appears to be coordinated among actors. Additionally, (b)(6), (b) further observed that understanding the effects of potentially large participants in futures markets is highly relevant to the Commission's interest in regulating activities in these markets.

One of the co-authors, (b)(6), (b)(7)(C) was a CFTC contractor under contract (b)(6), (b)(7)(C) and he received compensation from the CFTC for the research and production of the paper. According to appointment documentation provided by the Office of Human Resources, the second author, (b)(6), (b) was appointed as a limited term employee with the position title of consultant. (b)(6), (b) has been serving on a series of one year appointments with CFTC since (b)(6). As a limited term employee, (b)(6), (b) is bound by the federal ethics regulations. The first author, (b)(6), (b)(7)(C) was appointed as a limited term employee with the position title of consultant. (b)(6), (b) has been serving on a series of one year appointments with CFTC since (b)(6). As a limited term employee, (b)(6), (b) is bound by the federal ethics regulations. Both (b)(6), (b) and (b)(6), (b) produced this paper in their official capacities and the paper was written within the scope of their official duties. Neither (b)(6), (b) nor (b)(6), (b) received any compensation from an outside source for this paper. All three authors of Paper #10 signed the December 2012 non-disclosure agreement.

This paper was cleared by the Paper Review Committee for publication based on a review of the paper itself, a review of information provided by the authors, and the committee's conclusion that no information protected by Section 8 of the CEA, codified at 7 U.S.C. § 12, is revealed by the paper. More specifically, the Paper Review Committee has informed OGC that "it is unlikely that the paper could be used to identify any particular central bank in a manner that allows identification of that bank's positions, transactions, or strategies." In regard to specific Tables in the paper, "the Committee concluded that no specific details about a particular institution were revealed from the information provided" and that information "was too qualitative and incomplete to reveal confidential information." Based upon these representations, OGC concurs with the conclusion of the Paper Review Committee relating to Section 8 data.

Aside from the determination relating to Section 8, the paper is considered a government work product and may not be individually copyrighted by the authors. OGC concurs with the conclusion of the Paper

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Office of the Inspector General

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Review Committee and clears this paper for publication subject to the use of the disclaimer provided below.

The following disclaimer must be used:

The research presented in this paper was co-authored by (b)(6), (b)(7)(C) a former CFTC contractor who performed work under CFTC OCE contract (contract (b)(6), (b)(7)(C)) a CFTC limited term employee who was appointed as a consultant, and (b)(6), (b)(7) a CFTC limited term employee who was appointed as a consultant. The Office of the Chief Economist and CFTC economists produce original research on a broad range of topics relevant to the CFTC's mandate to regulate commodity futures markets, commodity options markets, and the expanded mandate to regulate the swaps markets pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act. These papers are often presented at conferences and many of these papers are later published by peer-review and other scholarly outlets. The analyses and conclusions expressed in this paper are those of the authors and do not reflect the views of other members of the Office of the Chief Economist, other Commission staff, or the Commission itself.

(b)(6), (b)(7)(C)

Assistant General Counsel

U.S. Commodity Futures Trading Commission

U.S. Commodity Futures Trading Commission
Office of the Inspector General

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by CFTC

Paper #12

(b)(6), (b)(7)(C) by Andrei Kirilenko, (b)(6), (b)(7)(C)

The Office of the General Counsel has completed its review of Paper #12. Our review included an evaluation of the findings of the Paper Review Committee, review for compliance with the Standards of Ethical Conduct for Employees of the Executive Branch, review for compliance with contracting requirements under the Federal Acquisition Regulations, and an analysis of whether the paper fits within the permitted research activities set forth in 7 U.S.C. § 22. (b)(6), (b)(7)(C) Economist in the Office of the Chief Economist, has confirmed for us that the writing of this paper was undertaken as one of the permitted research activities set forth in Section 18 of the Commodity Exchange Act ("CEA"), codified at 7 U.S.C. § 22, in the development of educational and other informational materials regarding futures trading among producers, market users and the general public and to carry out the general purposes of the Commodity Exchange Act, as amended. In particular, (b)(6), (b)(7)(C) has noted that the research fosters the public interest by providing insight into the "Flash Crash" of May 6, 2010. (This event was previously discussed in a joint SEC-CFTC report on the "Flash Crash"). The research poses three questions: 1) How did High Frequency Traders (HFTs) trade on May 6? 2) What may have triggered the Flash Crash? 3) What role did HFTs play in the Flash Crash? The analysis provides specific insight into the behavior and interactions of different trader types during this extreme event, facilitated by technological innovations.

One of the co-authors of this paper, Andrei Kirilenko, was a full-time CFTC employee who produced this paper in his official capacity within his scope of duty and received no other compensation for this paper. Another co-author, (b)(6), (b)(7)(C), was a full-time CFTC employee for a portion of the time when he worked on this paper. From (b)(6), (b)(7)(C) his work on the paper was conducted in his official capacity within his scope of duty, and he received no other compensation for the paper. From (b)(6), (b)(7)(C) was a CFTC contractor under contract (b)(6), (b)(7)(C) and received compensation from the CFTC for the research and production of the paper. From (b)(6), (b)(7)(C) to (b)(6), (b)(7)(C) was a CFTC contractor under contract (b)(6), (b)(7)(C) and received compensation from the CFTC for the research and production of the paper. The third co-author, (b)(6), (b)(7)(C) was a CFTC contractor under contract (b)(6), (b)(7)(C) and received compensation from the CFTC for the research and production of the paper. The final author, (b)(6), (b)(7)(C) was a CFTC contractor under contract (b)(6), (b)(7)(C) and received compensation from the CFTC for the research and production of the paper.

This paper was cleared by the Paper Review Committee for publication based on a review of the paper itself, a review of information provided by the authors, and the committee's conclusion that no information protected by Section 8 of the CEA, codified at 7 U.S.C. § 12, is revealed by the paper. More specifically, the Paper Review Committee has informed OGC that the smallest grouping of aggregated data within the paper was for 15 market participants, and that "15 was a sufficient level of aggregation for this sample" and "a grouping of 15 was likely to be sufficient to ensure that individual entity information was not revealed." The Paper Review Committee also discussed another table in the paper where "some cells might have a small population," but concluded that "this was unlikely to be an issue." The table presented summary statistics of the aggregate market over a short time frame, "limiting the Committee's concern over improper revelation of confidential data." Based upon these representations, OGC concurs with the conclusion of the Paper Review Committee relating to Section 8 data.

Aside from the determination relating to Section 8, the paper is considered a government work product and may not be individually copyrighted by the authors. OGC concurs with the conclusion of the Paper

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Review Committee and clears this paper for publication subject to the use of the disclaimer provided below.

The following disclaimer must be used:

The research presented in this paper was co-authored by Andrei Kirilenko, a former full-time CFTC employee, (b)(6),(b)(7)(C) a former CFTC contractor who performed work under CFTC OCE contract (b)(6),(b)(7)(C) (b)(6),(b)(7)(C) a former full-time CFTC employee and former CFTC contractor who performed work under CFTC OCE contracts (b)(6),(b)(7)(C) and (b)(6),(b)(7)(C) and (b)(6),(b)(7)(C) a former CFTC contractor who performed work under CFTC OCE contract (b)(6),(b)(7)(C). The Office of the Chief Economist and CFTC economists produce original research on a broad range of topics relevant to the CFTC's mandate to regulate commodity futures markets, commodity options markets, and the expanded mandate to regulate the swaps markets pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act. These papers are often presented at conferences and many of these papers are later published by peer-review and other scholarly outlets. The analyses and conclusions expressed in this paper are those of the authors and do not reflect the views of other members of the Office of the Chief Economist, other Commission staff, or the Commission itself.

(b)(6),(b)(7)(C)

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Paper #24

(b)(6), (b)(7)(C)

The Office of the General Counsel has completed its review of Paper #24. Our review included an evaluation of the findings of the Paper Review Committee, review for compliance with the Standards of Ethical Conduct for Employees of the Executive Branch, review for compliance with contracting requirements under the Federal Acquisition Regulations, and an analysis of whether the paper fits within the permitted research activities set forth in 7 U.S.C. § 22. (b)(6), (b)(7)(C) Economist in the Office of the Chief Economist, has confirmed for us that the writing of this paper was undertaken as one of the permitted research activities set forth in Section 18 of the Commodity Exchange Act ("CEA"), codified at 7 U.S.C. § 22, in the development of educational and other informational materials regarding futures trading among producers, market users and the general public and to carry out the general purposes of the Commodity Exchange Act, as amended. In particular, (b)(6), (b)(7)(C) has noted that the research fosters the public interest by providing methodological research into the classification of trader types by algorithm using market data rather than by self-identification or through classification by simple summary statistics. This methodological research provides a building block for a better understanding of price discovery mechanisms of markets and for investigating the impacts of technology and the interaction of different trader types on the dynamics of the price process. Additionally, (b)(6), (b)(7)(C) further explained that research on price discovery is relevant to the Commission's interest in fostering transparency in the futures and swaps markets and the paper includes specific proposals that have a direct bearing on price discovery role of the centralized market of DCMs.

According to information provided by the Office of the Chief Economist and the Procurement Office, (b)(6), (b)(7)(C) was a CFTC contractor under contract (b)(6), (b)(7)(C) and received compensation from the CFTC for the research presented in this paper.

This paper was cleared by the Paper Review Committee for publication based on a review of the paper itself, a review of information provided by the authors, and the committee's conclusion that no information protected by Section 8 of the CEA, codified at 7 U.S.C. § 12, is revealed by the paper. More specifically, the Paper Review Committee has informed OGC that "very little of the paper is based on internal CFTC data" and that "the author has sufficiently aggregated or masked information to avoid revealing position or other information protected under Section 8." Based upon these representations, OGC concurs with the conclusion of the Paper Review Committee relating to Section 8 data.

Aside from the determination relating to Section 8, the paper is considered a government work product and may not be individually copyrighted by the authors. OGC concurs with the conclusion of the Paper Review Committee and clears this paper for publication subject to the use of the disclaimer provided below.

The following disclaimer must be used:

The research presented in this paper was authored by (b)(6), (b)(7)(C) a former CFTC contractor who performed work under CFTC OCE contract (contract (b)(6), (b)(7)(C)). The Office of the Chief Economist and CFTC economists produce original research on a broad range of topics relevant to the CFTC's mandate to regulate commodity futures markets, commodity options markets, and the expanded mandate to regulate the swaps markets pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act. These papers are often presented at conferences and many of these papers are later published by peer-review and other scholarly outlets. The analyses and conclusions expressed in this

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paper are those of the authors and do not reflect the views of other members of the Office of the Chief Economist, other Commission staff, or the Commission itself.

(b)(6),(b)(7)

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Appendix 6 – Management Response

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**Commodity Futures Trading Commission Management Response
to the Office of the Inspector General's
Confidential Discussion Draft of the
Review of the Commission's Response to Allegations Pertaining to the Office
of the Chief Economist**

Dated: February 12, 2014

Joseph R. Cisewski, Co-Chief of Staff &
Co-Chief Operating Officer
Anthony C. Thompson, Executive Director
Jonathan L. Marcus, General Counsel
John L. Rogers, Chief Information Officer
Seyee Srinivasan, Chief Economist

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Introduction

In January 2013, then-Commodity Futures Trading Commission ("CFTC" or "Commission") Chairman Gary Gensler ("Chairman") requested a formal investigation into issues regarding the use of non-public data by the Office of the Chief Economist ("OCE") and the manner in which academic consultants and contractors were brought into the agency, their status with respect to the agency, their access to CFTC systems and information, and the adequacy of related documentation.¹ In his request, the Chairman noted that CFTC staff were reviewing issues spanning several important functions at the agency: human resources, procurement, logistics, data, and legal.² He also noted that all of these issues warranted the Inspector General's review.³ In response to this letter, the Inspector General opened an investigation to review the facts relevant to the issues raised in the Chairman's letter.

On December 18, 2013, the Office of the Inspector General ("OIG") provided a Confidential Discussion Draft of its Review of the Commission's Response to Allegations Pertaining to the Office of the Chief Economist (hereinafter "the Draft Report") to CFTC Management.⁴ CFTC Management appreciates the opportunity to review and respond to the Draft Report and also appreciates the time and attention that the OIG has spent reviewing the issues raised by the Chairman. While the Draft Report sets forth certain internal control issues and deficiencies, we want to bring to your attention several issues we have identified that we believe warrant certain revisions in the Draft Report.

As explained below, CFTC Management requests corrections to ensure the complete accuracy of the document and to address certain instances in which statements in the Draft Report may be read as conflicting and contradictory. We also request further sourcing and attribution of some of the facts alleged in the Draft Report, as well as the relevant witness statements or other documentation, such as employee administrative paperwork, reviewed and relied upon by the OIG to reach specific conclusions and make recommendations. As further explained below, CFTC Management also disagrees with certain legal conclusions set forth in the Draft Report concerning the applicability of the First Amendment to work conducted in OCE and the review process implemented by the agency, the appointment authority of the Chief Economist, retroactive corrections of paperwork, and the applicability of outside employment ethics regulations to OCE economists.

¹ Letter from Gary Gensler, Chairman, Commodity Futures Trading Commission, to Roy Levitt, Inspector General, Commodity Futures Trading Commission (Jan. 24, 2013) (hereinafter "Gensler Letter to OIG on OCE").

² *Id.*

³ *Id.*

⁴ OFFICE OF THE INSPECTOR GEN., COMMODITY FUTURES TRADING COMM'n, CONFIDENTIAL DISCUSSION DRAFT, REVIEW OF THE COMMODITY FUTURES TRADING COMM'n RESPONSE TO ALLEGATIONS PERTAINING TO THE OFFICE OF THE CHIEF ECONOMIST (2013) (hereinafter "DRAFT REPORT").

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In this response, we include specific suggestions to address some of the identified issues, including revisions to some portions of the Draft Report or requests for more facts to enable CFTC Management to make appropriate decisions on how to respond to the OIG's findings and conclusions. We welcome the opportunity to discuss the issues identified and our recommendations with the OIG further.

Part I of this memorandum provides background and a summary of CFTC Management action taken in response to the issues identified in the Chairman's referral to the OIG. Part II responds to the OIG's conclusion that the temporary suspension of publications produced by OCE economists potentially violates Section 18 of the Commodity Exchange Act ("CEA").⁷ Part II also discusses the use of CFTC data in economic research papers and responds to the OIG's findings and conclusions that the OCE economists properly accessed Commission data under the economic research program, and such access to data and information did not violate Section 8 of the CEA⁸ or the Privacy Act of 1974 ("Privacy Act").⁹ Part III sets forth CFTC Management's view of the correct First Amendment review standard for papers produced by OCE economists and responds to the Draft Report's allegation that the CFTC paper review process may potentially serve as a prior restraint on First Amendment protected speech. Part III also responds to certain factual statements in the Draft Report and requests that the OIG eliminate the attribution therein of the temporary suspension on publishing papers written by OCE economists during the pendency of the review to the Deputy General Counsel for (b)(6), (b)(7)(C). Part IV discusses the scope and impact of errors in administrative paperwork for OCE economists. Finally, Part V identifies additional factual issues and statements for which there does not appear to be adequate support.

I. Background and Summary of CFTC Management Action

On December 5, 2012, Mark Young and Jerry Salzman of Skadden, Arps, Slate, Meagher & Flom LLP ("Skadden"), contacted Dan Berkovitz, then CFTC General Counsel, on behalf of the Chicago Mercantile Exchange ("CME") regarding a paper entitled (b)(6), (b)(7)(C). Mr. Young and Mr. Salzman raised concerns that individuals who may have been given confidential CFTC information had used their access to that information and knowledge of the CME Order Book to market for themselves and this knowledge to traders and competitors of CME.¹⁰ In a subsequent letter, CME raised a series of questions about what authority was delegated to the Chief Economist with respect to using non-public information, particularly Section 8

⁷ 7 U.S.C. § 22(a) (the Commission must maintain a research program to provide information to the public and carry out the general purposes of the CEA).

⁸ 7 U.S.C. § 12(a) (the Commission cannot disclose certain non-public information, including business transactions, market positions, trade secrets, or customer names).

⁹ 5 U.S.C. § 552a.

¹⁰ E-mail from Dan M. Berkovitz, then General Counsel, to Eric Jutzon (b)(6), (b)(7)(C).

(b)(6), (b)(7)(C) Dec. 5, 2012 (re: FW: Use of CFTC data to a publicly disclosed entity).

¹¹ *Id.*

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information, and what criteria and procedures the Commission established for approving research, particularly for individuals conducting personal research.¹⁰ Following the initial conversation with the Skadden attorneys and at the direction of the Chairman, the then-CFTC General Counsel, Deputy General Counsel for (b)(6), (b)(7)(C) and other OGC attorneys initiated a review of the research work and papers produced by OCE. OGC reached out to OCE, the Office of the Executive Director ("OED") and the Office of Data and Technology ("ODT") to coordinate the review and assess corrective measures and programmatic improvements.

A. Role of the Office of Chief Economist

As explained on the CFTC website, the mission of OCE is described as follows:

The Office of the Chief Economist provides economic support and advice to the Commission, conducts research on policy issues facing the Commission, and educates and trains Commission staff. The OCE plays an integral role in the implementation of new financial market regulations by providing economic expertise and cost-benefit considerations underlying those regulations.¹¹

One function of OCE is to conduct economic research that assists the Commission in fulfilling obligations set out in Section 18 of the CEA, codified at 7 U.S.C. § 22, which requires the CFTC to:

"establish and maintain . . . research and information programs to:

- (1) determine the feasibility of trading by computer, and the expanded use of modern information system technology, electronic data processing, and modern communication systems by commodity exchanges, boards of trade, and by the Commission itself for purposes of improving, strengthening, facilitating, or regulating futures trading operations;
- (2) assist in the development of educational and other informational materials regarding futures trading for dissemination and use among producers, market users, and the general public; and
- (3) carry out the general purposes of this chapter." 7 U.S.C. § 22.

Since approximately 2010, OCE economists have focused on high-frequency trading and its effects on the markets, new trading instruments and market participants, and other new trading technologies as they are developed and deployed. This research furthers the CFTC's ability to meet mission-critical challenges, and OCE makes the results of its research available to the public through information published on the CFTC's website and by presenting its research at

¹⁰ Letter from Mark D. Young and Jerrold E. Salzman, Skadden, Arps, Slate, Meagher & Flom LLP, to Dai M. Berkowitz, General Counsel, Commodity Futures Trading Commission (Dec. 14, 2012).

¹¹ CFTC Organization: Office, Chief Economist (OCE), U.S. COMMODITY FUTURES TRADING COMMISSION, <http://www.cftc.gov/AboutCFTC/Organization/index.htm>.

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CFTC meetings or academic conferences. In addition to its full-time, permanent staff, OCE has staffed the office with contractors, compensated consultants appointed as limited-term employees, and uncompensated consultants appointed as limited-term employees.¹² The work conducted by OCE is overseen by the Chief Economist.

B. Review of CME Initial Concerns

On December 7, 2012, OGC discussed the scope of the (b)(6), (b)(7)(C) paper and the economic research with Andrei Kirilenko, then-CFTC Chief Economist ("Chief Economist"), in order to assess the concerns raised by CME. The Chief Economist informed OGC that in order to attract talent, the Commission enticed the economists with the opportunity to seek out research that benefited their professional aspirations and goals and also benefited the Commission.¹³ He explained the process whereby OCE economists determined their tasks and output.¹⁴ Initially, OCE economists asked for data sets that they were interested in analyzing and would spend six to eight weeks performing analyses and familiarizing themselves with the data.¹⁵ As for as the Chief Economist knew, there were no restrictions on the types of data the OCE economists could review.¹⁶ Following the initial review period, the OCE economist would present his or her preliminary results to other OCE economists.¹⁷ Thereafter, for four to eight weeks, the OCE economist would receive feedback from other OCE economists. The OCE economist would then spend four to twelve weeks writing a paper, which was presented internally.¹⁸ At this point, while the paper was not "public," the Chief Economist informed the OCE economist that the paper could be submitted for peer review, conferences, seminars, and workshops.¹⁹ The Chief Economist determined, on a case-by-case basis, whether OGC should be consulted to review the papers prior to publication.²⁰

¹² Hereinafter, full-time, permanent staff, contractors, compensated consultants appointed as limited-term employees, and uncompensated consultants appointed as limited-term employees will be referred to collectively as "OCE economists" unless otherwise specified.

¹³ Interview notes with (b)(6), (b)(7)(C) and (b)(6), (b)(7)(C) with Andrei Kirilenko, in Washington, D.C. (Dec. 7, 2012) (hereinafter "Interview with Andrei Kirilenko").

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ While OGC does not have facts about all papers produced by OCE economists, at least one paper (b)(6), (b)(7)(C) was presented at conferences and seminars (b)(6), (b)(7)(C) later.

²² *Id.* Notes of the telephone interview by (b)(6), (b)(7)(C) and (b)(6), (b)(7)(C) (Dec. 7, 2012).

²³ (b)(6), (b)(7)(C) (b)(6), (b)(7)(C)

²⁴ E-mail from (b)(6), (b)(7)(C) to Andrei Kirilenko (Nov. 1, 2012) (cc: Paper draft for CME clearance).

²⁵ (b)(6), (b)(7)(C)

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Two OCE economists shared the responsibility to transfer the requested data from the CFTC main network to a separate computer network for OCE economists ("OCENet").²¹ Originally, only the Division of Enforcement ("DOE") and the Division of Market Oversight ("DMO") were delegated authority to share the data; therefore, all data requests had to go through DOE or DMO.²² However, after the Chief Economist made a request, he was delegated limited authority to disclose confidential information to a contract market, swap execution facility, swap data repository, registered futures association or self-regulatory organization²³ and to disclose confidential information to any Federal or State department or agency, or foreign government, agencies and foreign futures authorities acting within the scope of their jurisdiction.²⁴

In an interview with OGC attorneys on December 11, 2012, (b)(6), (b)(7) an OCE economist tasked with transferring data, explained the procedures he followed to load data in OCENet.²⁵ When other OCE economists requested data, (b)(6), (b) pulled the data from the appropriate system on the CFTC main network and loaded it onto a Commission external hard drive.²⁶ (b)(6) did not routinely notify DOE, DMO, or DSIO of the data requests, nor did he track the requests.²⁷ The OCE economist who requested the data would download an individual machine (b)(6), (b) did not believe he had the permissions to log on as himself, and (b)(6), (b) attached the external hard drive to download the data.²⁸ (b)(6), (b) partially left the hard drive connected to the machine and returned to his office while the data was downloading.²⁹ When the download was complete, he did not immediately retrieve the external drive and the drive could remain connected to the machine for up to a week.³⁰ The external hard drives were not encrypted, and the data included account numbers and positions.³¹ (b)(6), (b) believed, but could not confirm, that the data also contained other personal identifiers.³² The data was downloaded to any location the OCE economists chose, including the OCENet server or the local hard drive.³³ (b)(6), (b) was uncertain whether OCE economists had individual accounts where data could be stored and, although OCE economists could elect to limit access to the data they requested, there was no requirement to do so.³⁴ OCE economists could easily attach external

²¹ Interview with Andre Kojanick, *supra* note 13; Interview notes of an interview by (b)(6), and (b)(6), (b)(7) with (b)(6), (b) former OCE economist, in Washington, D.C. (Dec. 14, 2012) (hereinafter "Interview with (b)(6), (b)(7)").

²² After the Comptroller reorganization, this authority was also delegated to the Division of Swaps and Intermediary

Overseeing ("DSIO").

²³ 17 C.F.R. § 140.72.

²⁴ 17 C.F.R. § 140.73.

²⁵ Interview with (b)(6), (b)(7) *supra* note 21.

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.*

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thumb drives and hard drives and download the data.³⁵ As far as (b)(6), (b)(7)(C) knew, there was no effort to remove the data sets from OCENet upon completion of an OCE economist's project.³⁶

C. Structure and Use of OCENet

After discussions with the Chief Economist and (b)(6), (b)(7)(C) OGC and ODT reviewed information security issues related to OCENet. According to John Rogers, CFTC Chief Information Officer ("CIO"), OCENet was established based on criteria provided by the Chief Economist. The CIO noted that it was ODT's practice to provide CFTC main network access to any staff for whom a security form (CFTC Form 719) was submitted to ODT. The CIO noted that internet-only access was available in the research workspace which contained OCENet, but was segregated from the CFTC main network, and OCENet and did not require a CFTC main network ID. Although some OCE economists were given CFTC main network accounts, OCE staff had the ability to provide individuals with access to OCENet regardless of whether the individual had access to the CFTC main network. Originally, the OCE economists were not given CFTC main network access or access to the internet. At some point, however, some OCE economists were given CFTC main network access and internet connections that were adjacent to the OCENet server. The server, while encrypted, was positioned in an open and widely accessible area next to the elevator lobby, which required a CFTC badge to access unescorted. Finally, when originally created, ODT established only one user identification and password that was shared among all OCE economists.³⁷ At some point (believed to be in 2011 or 2012), ODT began giving OCE economists unique login names and passwords.

OCE economists with OCENet access had unrestricted access to any data that was transferred onto OCENet by OCE economists. That data may have included information received, created, and maintained by the Commission which was covered by Section 8 of the CEA, information subject to the Privacy Act, information received pursuant to Memoranda of Understanding ("MOU"), and other non-public information.

D. Onboarding and Appointment of OCE Economists

During the review of issues raised by CME, OGC and OED also discovered that there were a number of questions surrounding the onboarding and appointment of OCE economists. Due to incomplete or missing documentation, OED was not able to quickly identify the status of individuals who had been provided badges or were affiliated with OCE. Based on the available information, the agency also was not able to quickly determine whether certain OCE economists were consultants or contractors and whether the appropriate and required paperwork had been completed prior to the start of their work in OCE.

³⁵ *Id.*

³⁶ *Id.*

³⁷ Interview with Andrei Kiblinko, *supra* note 13, DRAFT REPORT, at 10-11.

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For example, as part of the review, on February 28, 2013, OED reported that the status of (b) (6), (b) (7)(C) the OCE economist whose paper gave rise to CME's concerns, was "not properly appointed."³⁶ The same paperwork noted that other OCE economists also had the status of "not properly appointed," including (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C).

Indeed, the documentation available to OED revealed that other individuals mentioned in the Draft Report also had access to their administrative paperwork. For example, (b)(6), (b)(7)(C) is discussed on page 17 of the Draft Report, and the OIG notes that it initially appeared there were no records for (b)(6), (b)(7)(C) but he had already published a paper as a Commission employee. (b)(6), (b)(7)(C) came to OGC's attention on December 7, 2012, when OGC was asked to review a paper already publicly available on the internet that stated (b)(6), (b)(7)(C) had Commission financial data. Although the agency could not initially confirm his data, OGC later identified a CFTC Outlook email account for (b)(6), (b)(7)(C). According to the information provided, (b)(6), (b)(7)(C) did not have any appointment paperwork, but he had completed a CFTC Form 719 which permitted him to access the CFTC building. (b)(6), (b)(7)(C) CFTC Form 719 indicated that he did not require information technology or IT or system access, but he had a CFTC Outlook email account, an OCENet account, and CFTC main network access.

Additionally, on March 3, 2013, OED provided information reflecting additional administrative paperwork errors with respect to other OCE staff. For example, five individuals who, according to OED, had no official status with the agency were given badges, CFTC main network access, or both.⁶⁵ Some individuals had completed a CFTC Form 719 which afforded access to the CFTC building and CFTC main network access, but others had not.⁶⁶ Another seventeen individuals were identified by OED as having other serious errors including: incomplete or no appointment paperwork, CFTC main network access without appropriate paperwork, no valid

* E-mail from (b)(6), (b)(7)(C) to (b)(6), (b)(7)(C) on Mar. 1, 2013 (Covered Report Revised 7-28-13)

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49. DRAFT REPORT # 13, the OIG notes that OED eventually located (b)(6), security clearance, but was unable to locate an SFS22. (b)(7)(C)

(b)(6), (b)(7) [REDACTED] (b)(6), (b)(7) [REDACTED] (b)(6), (b)(7) [REDACTED] Dec. 7, 2012 (Re: OGC Paper Clearance); E-
mail: [REDACTED] (b)(6), (b)(7) [REDACTED] (b)(6), (b)(7) [REDACTED] Dec. 7, 2012 (Re: OGC Paper Clearance)

40 E-mail from (b)(6) (b)(6) to (b)(6) on (b)(6) (b)(6) Mar. 1, 2013 (OneNote Report Revised 2-28-

Attachment to E-mail from (b)(6), (b)(6) OED, to (b)(6), and (b)(6). (Mar. 1, 2013)
(Dec. 11, 2012) (Revised 2-28-13) (cc)

44 Attachment to E-mail: From: (b)(6) (b)(7)(C) [redacted] (b)(6) (b)(7)(C) [redacted] Mar. 4, 2013) (Re: Copy of Account Number(s); Attachment to E-mail: From: (b)(6) (b)(7)(C) [redacted] (b)(6) (b)(7)(C) [redacted] Mar. 1, 2013) (Re: Copy of Account Number(s);

(b)(6), (b)(7)(C) [REDACTED] Attachment to
and (b)(6)

(b)(6) (b)(7)(C) [REDACTED] FBI - Revised SAC Notice (b)(6) (b)(7)(C) [REDACTED] JAW/VL

Date: 7-20-2017
FBI - Revised SAC Notice (b)(6) (b)(7)(C) [REDACTED]
[REDACTED] (b)(6) (b)(7)(C) [REDACTED] (b)(6) (b)(7)(C) [REDACTED] (b)(6) (b)(7)(C) [REDACTED]

(OneNet) [redacted] 2-28-2013, see [redacted] Chart from [redacted] Mar. 2, 2013). E-mail from [redacted] Human Resources to [redacted] OELTEL, 15 July 2012 (Review OFF).

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contract, badge access without complete paperwork, or retention of the badge or network access after expiration of the contract.⁴⁷

E. Temporary Suspension of Publication and Closure of OCENet

OGC's initial review of OCE was conducted in coordination with OCE, OED, and ODT and identified deficiencies in the documentation related to the appointments of, and contracts for OCE economists. Based on this information, on December 7, 2012, the Chairman directed OGC to work with the Chief Economist to ensure that all OCE economists ceased sharing, publishing, distributing, or otherwise making available any papers or other products generated with CFTC trading data to any non-CFTC individuals or parties while the review of OCE was pending.⁴⁸ The Chief Economist promptly issued the instruction to OCE staff.⁴⁹

On December 10, 2012, all Commissioners were informed of the questions raised by CME about OCE research publications.⁵⁰ On December 11, 2012, Eric Juzenas, then-CFTC Chief Operating Officer ("Chief Operating Officer"), informed the CFTC's Inspector General that CME had raised concerns about OCE and that OGC was looking into these concerns. Because the agency could not confirm the status of individuals with known access to data through OCENet, on December 11, 2012, the Chief Operating Officer instructed the CIO to terminate access to data to anyone in OCE other than full-time CFTC employees.⁵¹ On December 12, 2012, the CIO confirmed that "[a]ll OCE non-FTE access to Commission technology has been disabled."⁵²

The Chairman's directions to suspend publication pending review and to limit access to non-public data to full-time CFTC employees were targeted and reasonable measures designed to address the discovery of both paperwork irregularities with respect to OCE personnel and security concerns with respect to OCENet.

F. Decision to Recommend that the Chairman Refer Matter to the OIG

When the issues uncovered by the review of CME's concerns were brought to CFTC Management's attention, the respective managers in OED and ODT worked closely with OGC to assess issues and to identify potential corrective measures and programmatic improvements. CFTC Management identified systemic problems with how administrative paperwork was processed and handled in OCE. We believed the problems were of such importance and magnitude that we collectively recommended that the Chairman refer the matter to the OIG for a

⁴⁷ General Letter to OIG on OCE, E-mail from (b)(6), (b)(7)(C) to Andrei Kirilenko (Dec. 7, 2012) (Re: Follow Up on OCE Review Discussion).

⁴⁸ E-mail from Andrei Kirilenko to (b)(6), (b)(7)(C) (Dec. 7, 2012) (Re: RE: Follow Up on OCE Review Discussion).

⁴⁹ E-mail from Dan Berkovitz to Jill Sommers, Bart Chilton, Scott O'Malley, Mark Walton, and Gary Goussier (Dec. 10, 2012) (Re: OCE Publication Issue).

⁵⁰ E-mail from Eric Juzenas to Anthony C. Thompson, (b)(6), (b)(7)(C), John L. Rogers, Dan M. Berkovitz, Catherine McCoy, and Andrei Kirilenko (Dec. 11, 2012) (Re: Access to Data).

⁵¹ E-mail from John L. Rogers to Anthony C. Thompson, (b)(6), (b)(7)(C), Eric Juzenas, Dan M. Berkovitz, Catherine McCoy, and Andrei Kirilenko (Dec. 12, 2012) (Re: RE: Access to Data).

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formal investigation. The Chairman expressed his concern about these problems and errors, and he swiftly reported the errors to the OIG.⁵³

G. Ongoing CFTC Management Response and Actions

After the issues were referred to the OIG by the Chairman and while the OIG review was pending, CFTC Management continued to address identified issues on a forward-looking basis. We limited our efforts to those action steps and items that could be taken without interfering with the review being conducted contemporaneously by the OIG. At the time of the January 2015 referral of this matter to the OIG, CFTC Management was unaware of the entire scope of issues surrounding the manner in which OCE economists were brought into the agency, their status with respect to the agency, their access to CFTC systems and information, and the adequacy of documentation related to their status. CFTC Management has at all times been committed to protecting confidential and non-public information and to the proper onboarding of its employees and contractors; we have taken swift and appropriate action to address identified internal control issues. CFTC Management's review included an examination of the roles played by OCE, ODT, OGC, and OED in staffing and providing support to the OCE Economists.⁵⁴

Since January 2013, CFTC Management has taken the following steps to address the issues raised by the review of OCE staffing and research:

- OED assessed the available documentation for every OCE economist including anyone with a badge, network access, an appointment via an SF-52, on detail from another federal agency or on a contract. OED reviewed the security clearance for every active OCE contractor and consultant.
- In coordination with OCE, OED (Logistics & Operations ("LO")) deactivated and collected the badges of any OCE staff member who was not appropriately appointed or whose appointment or contract was terminated.
- OED developed procedures to ensure that building and system access are established on the date of appointment and contract execution and terminated on the date of appointment or contract expiration and developed a process for ensuring access is terminated for any employee departing the agency.
- OED (LO) strengthened and enforced policies to ensure that the on-boarding process will not begin without receiving a copy of an SF-52 or contract number. OED (LO) requires and retains copies of SF-52s to ensure a complete and auditable clearance file.

⁵³ Gensler Letter to OIG on OCE.

⁵⁴ For a complete discussion of the CFTC Management review, please see the draft of the CFTC Business Management Report Regarding Office of Chief Economist Research Program.

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- If an appointment or contract is extended, OED requires a new Form 719 and the accompanying documentation prior to an extension or renewal of an individual's badge expiration date. OED implemented procedures for new badges (PIV cards) to ensure that only individuals with a valid appointment or contract are provided access to CFTC property. PIV cards contain an expiration date corresponding to the end of an employee's appointment or contract expiration date.
 - OED strengthened the manual processes used to process appointments.
 - OED (Human Resources) developed a Standard Operating Procedure for approving, processing, and tracking requests for uncompensated staff to ensure appropriate oversight of the use of uncompensated staff in the future.
 - OED and ODT require that all new staff, including contractors and consultants, complete privacy and security training within five days of starting at the CFTC.
 - ODT initiated a review of how to create a reconstituted environment in OCE, if determined appropriate, based on explicitly defined requirements so that hardware, software, and security control design are appropriate for the requirements. The review will consider:
 - o Segregation of data by MOU and access controls at the MOU level;
 - o Logging of approval and concurrence on datasets entering and exiting the environment;
 - o Delegation of administrative privileges;
 - o Increased logging of activities in the environment;
 - o Logical Access Control via HSPD-12 PIV cards;
 - o (b)(7)(E)
 - Potential separation of the environment from the CFTC network to allow greater flexibility for software use.
- OCC has compiled a preliminary database of over 100 MOUs entered into by the CFTC to share information with Federal, state and international entities and is working to make the database available as an agency resource. After the confidential data review is complete, OCC will work with the divisions and ODT to ensure proper access and controls are implemented.

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- OCE drafted a proposed workflow for long-term research projects that communicates to staff OCE's research mandate and the general process by which research will be conducted.
- OGC reviewed the legal authority for research conducted by the Commission, including authority for publication of Commission or individual papers and proper use of Section 8 data by CFTC employees.

CFTC Management requests that the OIG revise the Draft Report to reflect that, once CFTC Management was made aware of issues surrounding the manner in which the OCE economists were brought into the agency, their status with respect to the agency, their access to CFTC systems and information, and the adequacy of documentation related to their status, we took immediate and appropriate actions to remedy the issues while the matter was pending OIG review.

II. Established and Implemented New Review Process for Pending Papers

In addition to the CFTC Management actions described above and while the OIG review was pending, OCE, OGC, and the Office of the Chairman worked to implement a review process for papers written by OCE economists that addressed concerns raised that the existing Section 8 review of papers was not as robust as required to assess and identify potential aggregation and reverse engineering concerns raised by data, charts, tables, algorithms, and other information contained in the papers produced by OCE economists.

Historically, either the Chief Economist determined that a paper could be released or, at the request of the Chief Economist, an OGC attorney conducted a review of research papers to determine whether the statistical data and information presented in the papers disclosed "business transactions or market positions of any person and trade secrets or names of customers" in violation of Section 8(a) of the CEA.⁴³ More specifically, the OGC attorney completed a limited review of the paper to determine whether the statistical data and information

⁴³ Memorandum from (b)(6), (b)(7)(C) to (b)(6), (b)(7)(C) (Re: Section 8 Review of OCE Papers); Interview with Andrei Kirilenko, *supra* note 13, E-mail from (b)(6), (b)(7)(C) to (b)(6), (b)(7)(C) (Jan. 29, 2014) (Re: RE: Memorandum re Section 8 Review of OCE Papers); (b)(6), (b)(7) stated using issues with reviewing papers from some time in 2006 until December 2012; (b)(6), (b)(7) could only locate records clearing six papers produced by OCE economists, but recalls clearing more. E-mail from (b)(6), (b)(7) to (b)(6), (b)(7) (Jan. 29, 2014) (Re: RE: Memorandum re Section 8 Review of OCE Papers); see also E-mail from (b)(6), (b)(7) to Andrei Kirilenko (Sept. 29, 2011) (Re: RE: Paper for OGC clearance); E-mail from (b)(6), (b)(7) to Andrei Kirilenko and (b)(6), (b)(7) (Mar. 5, 2012) (Re: RE: Paper for OGC clearance); E-mail from (b)(6), (b)(7) to (b)(6), (b)(7) (Apr. 17, 2012) (Re: Andrei's Paper Compliance Review); E-mail from (b)(6), (b)(7) to (b)(6), (b)(7) (May 31, 2012) (Re: RE: Publication); E-mail from (b)(6), (b)(7) to Andrei Kirilenko (Sept. 27, 2012) (Re: Paper for OGC Review for Compliance with Section 8 and Request for Approval of Outside Employment); E-mail from (b)(6), (b)(7) to Andrei Kirilenko (Nov. 1, 2012) (Re: Paper draft for OGC clearance); (b)(6), (b)(7) As part of the newly implemented review process, OGC has implemented new recordkeeping requirements so that records of OGC legal review and clearance of papers will be kept in appropriate records systems as required by the Federal Record Act of 1950, as amended. 44 U.S.C. §§ 2901 et seq., 3101 et seq., 3301 et seq.

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presented in the paper either met, or exceeded, the level of aggregation for data and information that was contained in the Commission's Commitment of Traders ("COT") Reports.⁶⁰

After the Chairman referred this matter to the OIG, the Office of the Chairman, OCE, and OGC began working through a new review process for papers that would enable the agency to assess and identify potential disclosure of Section 8 information in data, charts, tables, algorithms, and other information contained in the papers produced by OCE economists. As the Draft Report notes, reviewing the OCE economists' papers for information protected under Section 8 can be "complex, requiring an examination of context to determine whether aggregated trading data in an economic research paper may be reverse engineered. . . ."⁶¹ This complex analysis is the very reason why the Chairman requested a review of the Commission's historical practice of reviewing papers. After the review, CFTC Management determined that it would be appropriate to expand the review of all papers to engage in a more complex, fact-intensive review in an effort to identify Section 8 data in papers.

On February 13, 2013, Scott Mixon, then-CFTC Acting Chief Economist, the Chief Operating Officer, and the Deputy General Counsel for (b)(6), (b)(7) met to discuss how to move forward with paper review. They determined that additional information from the OCE economists was necessary to complete the review. On February 14, 2013, Mixon sent all OCE economists who had drafted papers for review a series of questions drafted by OGC with input from OCE and the Office of the Chairman.⁶² On March 15, 2013, to move the review of papers forward, the Chief Operating Officer reached out to OGC staff in DMO, DSIO, DDT, and OCE with identified skill sets that would enable them to review papers for Section 8 information (hereinafter "Paper Review Committee").⁶³ On May 9, 2013, the then-Acting Chief Economist circulated a draft "checklist"/framework for paper review to the Chief Operating Officer and the Deputy General Counsel for (b)(6), (b)(7) prior to the first meeting of the Paper Review Committee on May 20, 2013.⁶⁴ At the time of the May 20, 2013 meeting, OCE identified 23 papers for review.⁶⁵

At the first meeting of the Paper Review Committee, individual papers were assigned to committee members for Section 8 review before discussion by the entire group.⁶⁶ The Paper Review Committee is tasked with reviewing each paper and assessing the type of data and

⁶⁰ Memorandum from (b)(6), (b)(7) to (b)(6), (b)(7) Feb. 8, 2013) (Re: Section 8 Review of OCE Papers); Draft Report, at 15.

⁶¹ E-mail from Scott Mixon to OCE economists (Feb. 14, 2013) (Re: CFTC research review process for existing working papers).

⁶² E-mail from Eric Juchacz to CFTC staff (Mar. 15, 2013) (Re: Section 8 Review); E-mail from Eric Juchacz to Jonathan Thompson, (b)(6), (b)(7), Scott Mixon, (b)(6), (b)(7), Dan Beskovitz, (b)(6), (b)(7), and (b)(6), (b)(7) (Mar. 15, 2013) (Re: Review of OCE research papers).

⁶³ E-mail from Scott Mixon to Eric Juchacz and (b)(6), (b)(7) (May 9, 2013) (Re: Checklist for paper review); E-mail from Scott Mixon to Paper Review Committee (May 20, 2013) (Re: RE: OCE Paper Review).

⁶⁴ Attachment to E-mail from Scott Mixon to Paper Review Committee (May 20, 2013) (Re: RE: OCE Paper Review).

⁶⁵ E-mail from Scott Mixon to Paper Review Committee (May 20, 2013) (Re: RE: OCE Paper Review).

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information used, the data and information sources, and the number of traders/entities, among other factors. If issues or concerns are identified during this review, the Paper Review Committee will then engage in discussions with the author(s) so that the paper(s) can be reworked to address any concerns about the potential disclosure of Section 8, confidential, non-public, or other protected information and data. After the Paper Review Committee completes its review, it sends the paper with its recommendation to OGC.

On June 18, 2013, the Paper Review Committee provided OGC with three papers for legal review.⁶³ OGC attorneys next conduct a legal compliance review which includes a determination of the OCE economist's status, a review of whether there has been any disclosure of Section 8 data or other protected data or information, and a review for compliance with the ethics regulations, confidentiality regulations, the Privacy Act, and Section 16 of the CEA. In addition, if the paper was written pursuant to a contract, OGC reviews the paper for compliance with the terms of the individual contract and any applicable non-disclosure agreement. On September 18, 2013, the Paper Review Committee provided OGC with two papers for review.⁶⁴ On October 23, 2013, OGC completed the legal review of three papers.⁶⁵ On November 27, 2013, December 3, 2013, and December 20, 2013, the Paper Review Committee provided the OGC with a total of seven additional papers for review.⁶⁶

OGC has devoted as many resources as possible, consistent with existing budget and staffing, to the legal review of papers. It is important to note that during the summer and fall of 2013 while the paper review process was pending, there were several major legal issues facing CFTC, including responding to a congressional inquiry, the October government shutdown, CFTC administrative furloughs, and other appropriations issues, including the agency's transfer authority. Regarding the time frame for OGC review and clearance, none of the papers which have been cleared by the Paper Review Committee have been awaiting OGC clearance for more than five months. Currently, OGC has nine papers under review and the Paper Review Committee has twelve additional papers which may be forwarded to OGC for review. (b) (5)

⁶³ E-mail from Scott Mixon to (b) (6), (b) (7) (C) June 18, 2013 (Re: Papers for potential clearance: theory or publicly available data only) (Paper #1, Paper #11, and Paper #14).

⁶⁴ E-mail from Scott Mixon to (b) (6), (b) (7) (C) Sept. 18, 2013 (Re: FW: Research Paper review) (Paper #1 and Paper #3). The OGC attorneys completed the legal review of these two papers in the next two weeks.

⁶⁵ E-mail from (b) (6), (b) (7) (C) to Scott Mixon (Oct. 23, 2013) (Re: Papers for Potential clearance: theory or publicly available data only) (Paper #7); E-mail from (b) (6), (b) (7) (C) to Scott Mixon (Oct. 23, 2013) (Re: Papers for Potential clearance: theory or publicly available data only) (Paper #12); E-mail from (b) (6), (b) (7) (C) to Scott Mixon (Oct. 23, 2013) (Re: Papers for Potential clearance: theory or publicly available data only) (Paper #14).

⁶⁶ E-mail from Scott Mixon to (b) (6), (b) (7) (C) and (b) (6), (b) (7) (C) Nov. 27, 2013 (Re: OCE Paper for clearance: Subject Matter Committee referral) (Paper #10, Paper #24); E-mail from Scott Mixon to (b) (6), (b) (7) (C) and (b) (6), (b) (7) (C) Nov. 27, 2013 (Re: OCE Paper for clearance: Subject Matter Committee referral) (Paper #20); E-mail from Scott Mixon to (b) (6), (b) (7) (C) and (b) (6), (b) (7) (C) Dec. 3, 2013 (Re: OCE Paper for clearance: Subject Matter Committee referral) (Paper #9); E-mail from Scott Mixon to (b) (6), (b) (7) (C) Dec. 20, 2013 (Re: OCE Paper for clearance: Subject Matter Committee referral) (Paper #8); and E-mail from Scott Mixon to (b) (6), (b) (7) (C) and (b) (6), (b) (7) (C) Dec. 20, 2013 (Re: OCE Paper for clearance: Subject Matter Committee referral) (Paper #12).

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continuing effort to move the paper review forward, OGC has assigned paper review to four OGC attorneys. CFTC Management is confident that the paper review process will move more quickly going forward as all parties involved become familiar with the process and review required and has committed the resources in order to accomplish a quicker review.

II. Use of CFTC Data in Economic Research Papers

The Draft Report finds that the Chairman's decision to temporarily suspend publication potentially violated Section 18 of the CEA.⁶⁷ Further, the Draft Report discusses the use of data and information protected by Section 8 of the CEA ("Section 8 data") and mentions the Privacy Act, but makes no findings about the use of this data by OCE economists.⁶⁸ We have reviewed the Draft Report and disagree with the analysis regarding Section 18 and Section 8 of the CEA. Further, we believe the Draft Report does not fully address the issues concerning the use of information and data by OCE economists. Section A below analyzes the requirements of Section 18 and demonstrates that the Commission fully meets the Section 18 requirements and that the temporary ban on publication was not a potential violation of Section 18. Section B provides a brief history of Section 8 and analysis of access to Section 8 data. Section C provides the legal basis for sharing information covered by the Privacy Act. Sections D and E address the issues arising from access to and use of data and information that was received pursuant to a MOU or is non-public. CFTC Management believes that the issues identified in this section are significant and request that the Draft Report be revised as discussed below.

A. Decision to Temporarily Suspend Publication of Economic Research Papers Did Not Potentially Violate Section 18 of the Commodity Exchange Act

The CEA requires the Commission to maintain a research and information program, and Section 18 of the CEA provides the Commission with broad authority to conduct research for the "development of educational and other informational materials regarding futures trading for dissemination and use among producers, market users, and the general public . . ."⁶⁹ In addition, the CEA permits the Commission to conduct research on other topics to carry out the general purposes of the CEA.⁷⁰ The Commission accomplishes this requirement through a variety of methods including: staff advisories, providing updated education materials (e.g., <http://www.cftc.gov/ConsumerProtection/EducationCenter/index.html>), publishing reports about markets (e.g., the Commitment of Traders Reports), issuing press releases, facilitating speeches by individual Commissioners and staff, and publishing of papers prepared by OCE and other Commission staff.

⁶⁷ DRAFT REPORT, at iv, 15.

⁶⁸ *Id.* at 12-13.

⁶⁹ 7 U.S.C. § 22(a)(2).

⁷⁰ 7 U.S.C. § 22(a)(3) (authorizing research and information programs to "carry out the general purposes of this chapter").

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As noted in the Draft Report, there are four economic research papers posted on the Commission's public website, the most recent of which was published December 4, 2008.⁷¹ In contrast to the small number of economic research papers, the Commission's public website contains hundreds of other reports and informational materials which the agency publishes each year to inform the public about commodity and futures trading, including hundreds published during the OIG's and OGC's reviews. OCE has continued to perform valuable economic research and recently developed and published the swaps report, which is based on Section 8 data, but has been aggregated in a manner that complies with the requirements of Section 8. On a weekly basis, it provides market participants and the public aggregated data on open swing positions and summarizes transaction activity. Therefore, the economic research papers are only one component of the Commission's efforts to educate and inform the public through the work of CFTC economists and the economic research supported by the CFTC. Furthermore, according to the Draft Report, most of the economic research papers prepared by OCE economists are published in private journals.⁷² While publication of economic research in journals is important, several of the papers at issue are published for a very small and specific target academic audience rather than in media and outlets aimed broadly at "producers, market users, and the general public." 7 U.S.C. § 22(a). For example, (b)(6), (b)(7)(C) paper, (b)(6), (b)(7)(C) was published on its webpage through (b)(6), (b)(7)(C) and he notes that the paper is a "Job Market Paper" and his thesis for his Ph.D. in (b)(6), (b)(7)(C) paper (b)(6), (b)(7)(C) is similarly identified as a "Job Market Paper" and is located on the (b)(6), (b)(7)(C) website.⁷³

While the papers may reach the target audience listed in Section 18, the distribution to a primarily academic audience undercuts the Draft Report's contention that these economic research papers are designed specifically to inform the broader audiences listed in Section 18.⁷⁴ We believe that the Commission fulfills its Section 18 obligations by providing staff advisories, educational materials, speeches and reports, as well as by supporting economic research and the development of papers using CFTC resources, time and data. Indeed, nowhere does Section 18 require the Commission to publish economic research in academic journals. The Draft Report agrees that "section 18 does not specifically require the Commission to conduct economic research through the publication and presentation of juried economic research . . ."⁷⁵ This acknowledgment is not consistent with OIG's conclusion that the temporary suspension of

⁷¹ The four papers posted were published on June 8, 2008, May 13, 2009, and April 5, 2005. See also DRAFT REPORT at 9.

⁷² DRAFT REPORT at 9.

(b)(6), (b)(7)(C)

⁷³ DRAFT REPORT, at iv, 15, 31.

⁷⁴ Id. at 15.

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publication of economic research papers threatened to violate Section 18 of the CEA.⁷⁸ The temporary suspension of publication while paperwork irregularities and security concerns were investigated did not violate Section 18. These publications are only one component of many types of material that the agency produces, and continues to produce, to educate market participants and the public consistent with the requirements of Section 18.

As discussed in greater detail in Part I.H above and Part III.C.2 below, the agency has set up a thorough review process and is clearing papers on a case-by-case basis, consistent with the agency's statutory responsibility to protect Section 8 and other non-public data provided by market participants. For the duration of the OIG review into this matter and on a going-forward basis, the agency is committed to devoting available staff resources to the review of papers because it recognizes the importance of these papers to the individuals that have written them and the potential educational value they offer. But nothing in the Commission's review process threatens to violate, much less violates, Section 18 of the CEA. Therefore, CFTC Management disagrees with the conclusion that, by temporarily halting publication of the economic research papers during the pendency of a review, the agency has, in any way, "risked violating section 18 of the Act"⁷⁹

CFTC Management respectfully requests that the OIG reconsider the Section 18 analysis in the Draft Report because, by the OIG's own conclusion, Section 18 does not require the publication of economic research in academic journals,⁸⁰ and therefore, the temporary actions that affected a non-statutorily required part of the agency's many efforts to disseminate information cannot risk violating Section 18. We request that the Draft Report be revised accordingly to reflect the requirements of Section 18 and to eliminate the suggestion that there may have been a violation or potential violation of that provision. In the alternative, because there is no violation or threatened violation of Section 18, that section of the Draft Report can be eliminated.

B. Access to Information Protected under Section 8 of the Commodity Exchange Act

As part of the Commission's efforts to educate and inform the public through the work of economists and the economic research supported by the agency, the Commission makes great efforts to ensure Section 8 data is protected and is not shared unless authorized. We agree with the Draft Report's summary of the general principles established by *Freeman v. Seligson*, which distinguished between a limited release of Section 8 material in a judicial proceeding and the general Congressional concern of "widespread dissemination of information not otherwise available to the public"⁸¹

⁷⁸ *Id.* at iv, 15.

⁷⁹ *Id.* at iv.

⁸⁰ *Id.* at 15.

⁸¹ *Freeman v. Seligson*, 405 F.2d 1326, 1348-49 (D.C. Cir. 1968); DRAFT REPORT, at 12-13.

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The provision of the CEA that is currently Section 8 originated in the Futures Trading Act, and was shortly thereafter incorporated into the Grain Futures Act, the successor statute.⁶² Congress substantially amended the Grain Futures Act as the Commodity Exchange Act; however, no substantial changes were made to the language of Section 8.⁶³ The Acts provided the Secretary of Agriculture with extensive powers of investigation to enable Federal supervision and regulation of commodity markets, particularly to prevent sudden fluctuations resulting from speculation, manipulation, and control.⁶⁴ However, Congress recognized that there was a benefit from some hedging and speculation, which would not be feasible if sensitive information regarding that activity were subject to competitive scrutiny.⁶⁵ Thus, Congress authorized the Secretary to collect data essential to overseeing the operation of commodity markets without opening the data to the public eye.⁶⁶

In the ensuing years, the Department of Agriculture cited Section 8 and its precursors to consistently withhold all transactions of a person, and all trade secrets and names of customers, except those found guilty of a violation, whereby the disclosure was made public in a public hearing as provided by law.⁶⁷ In addition, the Secretary consistently refused to provide data contained in reports when requested by Congress, citing the need to keep the business information confidential.⁶⁸ The most significant refusal to provide the requested information to Congress occurred in 1947 when the Senate Committee on Appropriations requested that the Secretary provide, in executive session, the names and amounts of speculators' purchases. The Secretary denied this request because "[t]he request calls for disclosure of the names and separate business transactions of persons trading in commodity futures whose trades and market positions are reported in confidence to the Department of Agriculture. These reports are obtained

⁶² Futures Trading Act, § 9, Pub. L. 67-66, 42 Stat. 147 (1921); Grain Futures Act, § 3, Pub. L. No. 67-331, 42 Stat. 978 (1922), amended by Pub. L. No. 74-675, 49 Stat. 1491 (1936).

⁶³ Commodity Exchange Act, Pub. L. No. 74-675, 49 Stat. 1491 (1936).

⁶⁴ "... the transactions and prices of commodity on such boards of trade are susceptible to speculation, manipulation, and control and sudden or unreasonable fluctuations in the prices thereof frequently occur as a result of such speculation, manipulation or control, which are detrimental to the producer or the consumer and the persons handling commodity and products and byproducts thereof in interstate commerce, and such fluctuations in prices are an obstruction to an unimpeded interstate commerce in commodity and the products and byproducts thereof and render regulation imperative for the protection of such commerce and the national public interest therein."

Commodity Exchange Act, § 3, Pub. L. No. 74-675, 49 Stat. 1491 (1936) (current version at 7 U.S.C. § 5).

Substantially the same provision appeared in the Grain Futures Act: Grain Futures Act, § 3, Pub. L. No. 67-331, 42 Stat. 984 (1922), amended by Pub. L. No. 74-675, 49 Stat. 1491 (1936).

⁶⁵ 58 CONG. REC. 672-12 (1921); 58 CONG. REC. 675-71 (1922); 61 CONG. REC. 1,321-22, 1,328, 4,762, 4,768 (1921); 62 CONG. REC. 9,447 (1922); 80 CONG. REC. 616, 8,012 (1936); *Regulation of Grain Exchanges: Hearing on H.R. 8829 Before the H. Comm. on Agric.*, 73rd Cong., at 2-3 (1934) [hereinafter *Hearing on H.R. 8829*].

⁶⁶ In *Daniels Feedlot Co. v. Hyde*, the Seventh Circuit ruled that Section 8 of the Act placed a seal of confidentiality upon information obtained in reports required under the Grain Futures Act. "[Section 8] forbids the revealing by the Secretary and his assistants of individual trades and of customers; and the findings here, predicated on this evidence, show that in the decade of experience since the act became operative no instances appear where any such confidence has been violated..." 65 F.2d 350, 352 (7th Cir. 1933).

⁶⁷ *Hearing on H.R. 8829*, at 2-3; *Regulation of Commodity Exchanges: Hearing on H.R. 3009 Before the H. Comm. on Agric.*, 74th Cong. (1935).

⁶⁸ 61 CONG. REC. 1,321 (1921); *Hearing on H.R. 8829*, at 22-23; S. DOC. NO. 264 (1928); 70 CONG. REC. 4,982 (1928); S. DOC. NO. 61, 76 CONG. REC. 3,381 (1933).

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currently under authority of the Commodity Exchange Act."⁸¹ Section 8 prohibited disclosure. Following this event, Congress passed a new provision that relaxed the Section 8 proscription in limited circumstances, which led to the currently enacted provisions.

Section 8 authorizes the Commission to make "investigations as it deems necessary to ascertain the facts regarding the operations of boards of trade and other persons subject to the provisions of this Act."⁸² Further, it allows the Commission the discretion to "publish . . . the results of any such investigation and such general statistical information gathered therefrom as it deems of interest to the public . . ."⁸³ However, it specifically excludes certain information from publication: "except as otherwise specifically authorized in this Act, the Commission may not publish data and information that would separately disclose the business transactions or market positions of any person and trade secrets or names of customers."⁸⁴ Exceptions to the non-disclosure provision include disclosures (1) in connection with a congressional proceeding, administrative or judicial proceedings brought under the CEA, or certain bankruptcy proceedings; (2) in reports or orders related to the conduct of any registered entity or to the transactions of any person found guilty of violating the provision of the CEA or regulations, rules, or orders of the Commission; (3) to a Congressional committee acting within the scope of its jurisdiction; (4) to another department or agency of the United States acting within the scope of its jurisdiction;⁸⁵ (5) to another department or agency of any State acting within the scope of its jurisdiction;⁸⁶ (6) to another foreign futures authority or another department or agency of any foreign government or any political subdivision thereof acting within the scope of its jurisdiction;⁸⁷ and (7) to the Comptroller General for the purpose of conducting reviews and audits.⁸⁸

The legislative history of Section 8 demonstrates Congress' clear understanding that this data is some of the most sensitive data the Commission possesses. Past administrations went to great lengths to maintain the confidentiality of Section 8 data, which ultimately led to the exceptions above. Within the limited exceptions to non-disclosure, Congress specified the only purposes for which further disclosure was permissible. The lengthy history and evolution of Section 8

⁸⁰ 93 CONG. REC. 13,616 (1947).

⁸¹ 7 U.S.C. § 2(e)(3).

⁸² *Id.*

⁸³ *Id.*

⁸⁴ The Act restricts the entity's ability to further disseminate the information only in "any action or proceeding under the laws of the United States to which it, the Commission, or the United States is a party." 7 U.S.C. § 12(e).

⁸⁵ The Act restricts the entity's ability to further disseminate the information only in "connection with an adjudicatory action or proceeding brought under this Act or the laws of such State or political subdivision to which such state or political subdivision . . . is a party." *Id.*

⁸⁶ The Commission shall not furnish the information until it is satisfied that the information will not be disclosed except in connection with an "adjudicatory action or proceeding brought under the laws of such foreign government or political subdivision to which such foreign government or political subdivision . . . is a party." *Id.*

⁸⁷ The Act provides that in reports the Comptroller General "shall not include data and information that would separately disclose the business transaction of any person and trade secrets or names of customers . . ." 7 U.S.C. § 12(c).

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illustrate Congressional intent to narrowly tailor any exceptions to the general prohibition on releasing Section 8 data. Congress recognized that, while the Commission needs Section 8 data to carry out its statutory purposes, this data warrants strong protections against public disclosure to avoid substantial injury to market participants.

Based on discussions with the OCE economists who downloaded the data onto OCENet, it is our understanding that many of the economists accessed and analyzed Section 8 data, which formed the basis for their publications.⁷⁷ The Draft Report states that "there is no basis to equate improper onboarding paperwork with improper access to CFTC Confidential data. . . . However, as described in greater detail in Part I.D above, as a result of the improper or missing paperwork, some OCE economists were not properly appointed or they retained access to the building and data after their term had expired; therefore, it was not appropriate to share Section 8 information with these individuals. In addition, many papers had co-authors and were juried papers submitted for peer review and we do not have sufficient facts to determine whether the data was disclosed to co-authors or jurors.⁷⁸ Neither of these possibilities would be permissible disclosures of Section 8 data. However, the Draft Report contains no discussion of whether such disclosure occurred.

CFTC Management agrees with the OIG's statement that "individuals employed by CFTC and physically present at the CFTC are granted access to information protected under Section 8 in the course of their work for the Commission."⁷⁹ However, the Draft Report notes that there was an "absence of controls"⁸⁰ with respect to data available on OCENet⁸¹ and problems with appointments; particularly in combination, these findings give cause for concern that access to protected data may not have been limited to individuals employed by the Commission and physically present here.

In addition, the Draft Report notes that some economists published papers "disregarding the Agency's prohibition . . . [on] publishing papers while the agency review was pending" and

⁷⁷ Interview with (b)(6), (b)(7)(C) and note 21. Additionally, in the paper that prompted the inquiry, the OCE economist stated that his analysis was based on (b)(6), (b)(7)(C).

⁷⁸ Draft Report, at 19.

⁷⁹ *Id.* at 13.

⁸⁰ *Id.* at 13.

⁸¹ *Id.* at 27, 31.

⁸² CFTC Management believes that the finding in the Draft Report that there was an "absence of controls" is an overstatement. *Id.* While there was not segregated access to data within the OCENet environment and there were not automated controls, CFTC Management had implemented layers of controls on the access to and use of data through agency-wide policy, procedure and guidelines as well as training. CFTC Management acknowledges that these controls may not have been employed as successfully as intended in OCE, and may not have generally been sufficient, but CFTC Management is committed to ensuring that effective controls are implemented going forward. CFTC Management request that references in the Draft Report to an "absence of controls" be revised accordingly.

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specifically notes that (b)(6), published a paper in (b)(6), (b)(7) on high-frequency trading – a subject similar to the initial paper he wrote using Commission data.¹⁰³ Additionally, the Draft Report notes that removable devices were attached to the computers assigned to OCENet.¹⁰⁴

CFTC Management requests that the OIG share any forensic analysis and/or interview notes with respect to the OCN economists and their use of the data. CFTC Management is analyzing whether it will recommend additional action if data was improperly disclosed.

C. Access to Information Protected by the Privacy Act

In addition to complying with the requirements of Section 8 of the CEA, the Commission also endeavors to ensure information protected by the Privacy Act is not inappropriately accessed or disclosed as part of the Commission's efforts to educate and inform the public. The Draft Report observes that the Commission's Privacy Act notices permit a "number of non-public disclosures"¹⁰⁵ of data contained in the Commission's systems of records in addition to permissible disclosures under Section 8.¹⁰⁶ The Privacy Act was enacted to regulate the maintenance, use, and dissemination of information in identifiable form held in a "system of records" in federal agency files. Generally, the purpose of the Privacy Act is to balance the government's need to maintain information about individuals with the individuals' right to prevent unwarranted use and disclosure of their personal information. The Privacy Act's four main objectives are to (1) restrict disclosure of personally identifiable records; (2) grant individuals rights of access to records about themselves; (3) grant individuals the right to amend agency records about themselves in certain circumstances; and (4) establish practices to govern the collection, maintenance, and dissemination of records.¹⁰⁷

The Privacy Act prohibits agencies from "disclos[ing] any record which is contained in a system of records by any means of communication to any person, or to another agency, except pursuant to a written request by, or with prior written consent of, the individual to whom the record pertains" 5 U.S.C. § 552a(b). There are twelve exceptions to this prohibition; however, with regard to OCN economists' papers, there are likely only two that apply. They are commonly referred to as the "need to know" and "routine use" exceptions. The "need to know" exception allows for disclosure "to those officers and employees of the agency which maintains the record who have a need for the record in the performance of their duties." 5 U.S.C.

¹⁰³ DRAFT REPORT, at 33 n.128.

¹⁰⁴ *Id.* at 2.

¹⁰⁵ *Id.* at 13, 17 n.62.

¹⁰⁶ Section 8 data is maintained in the Enterprise Surveillance, Oversight & Risk Monitoring System. Privacy Act of 1974 System of Records Notice, 77 Fed. Reg. 58,814 (Sept. 24, 2012).

¹⁰⁷ U.S. DEPARTMENT OF JUSTICE OVERVIEW OF THE PRIVACY ACT OF 1974 (2012), at 4.

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§ 552a(b)(1). The “routine use” exception allows disclosure for a routine use as defined in the Privacy Act subsections (a)(7) and (e)(4)(D).¹⁰⁸

Consistent with the Privacy Act, release of information in any system of records is proper only when the OCE economists have been properly employed and are “performing or working on a contract, service, grant, cooperative agreement, or job for the Federal government when necessary to accomplish an agency function.”¹⁰⁹ There are no routine use exceptions allowing the Commission to provide the information that may have been accessed by OCE economists working under expired contracts, who did not meet the proper hiring conditions or who had access to the information for purposes other than to accomplish an agency function.¹¹⁰ Additionally, there are no routine use exceptions that would allow access to records in Privacy Act systems to private citizens. If as the Draft Report suggests, the OCE economists were preparing the papers as private citizens,¹¹¹ their access to the data would likely be a breach of the Privacy Act. Although the data from the OCENet server, the hard drives of each computer attached to the server, and the various external hard drives and thumb drives that were attached to the OCENet computers were captured forensically, CFTC Management has not been provided with the fact analysis of the data on OCENet to determine whether the Privacy Act was breached. If a breach has occurred, the Agency, through the Senior Agency Official for Privacy (the Executive Director), is required to report the breach and determine any necessary remediation. The Draft Report notes that some of the information on OCENet is protected by the Privacy Act,¹¹² but does not report any findings or conclusions with respect to whether any such information was improperly accessed.

CFTC Management requests that the OIG share any available data that may have been obtained by forensic review. We agree that the lack of segregated access to data within OCENet and the lack of automated controls may make forensic analysis difficult; however, as noted in the Draft Report, beginning in late 2011, CFT required individual user accounts and passwords.¹¹³

¹⁰⁸ 5 U.S.C. § 552a(b)(1) defines routine use as “the use of such record for a purpose which is compatible with the purpose for which it was collected.” Publication in the Federal Register is required for “each routine use of the records contained in the system, including the categories of users and the purpose of such use.” 5 U.S.C. § 552a(e)(4)(D).

¹⁰⁹ The Commission has nineteen routine uses that apply to the Commission’s system of records. Privacy Act of 1974, Notice, Publication of the Systems of Records Managed by the Commodity Futures Trading Commission, 76 Fed. Reg. 5,974, 5,974-16 (Feb. 2, 2011). The routine use at issue here is number 13, which states “Information may be disclosed to contractors, grantees, volunteers, experts, students, and others performing or working on a contract, service, grant, cooperative agreement, or job for the Federal government when necessary to accomplish an agency function.” 12 at 5,975.

¹¹⁰ Privacy Act of 1974, Notice, Publication of the Systems of Records Managed by the Commodity Futures Trading Commission, 76 Fed. Reg. 5,974, 5,975 (Feb. 2, 2011).

¹¹¹ The Commission published nineteen routine uses applicable to Commission systems of records. Privacy Act of 1974, Notice, Publication of the Systems of Records Managed by the Commodity Futures Trading Commission, 76 Fed. Reg. 5,974, 5,974-16 (Feb. 2, 2011).

¹¹² DRAFT REPORT, at 20, 22.

¹¹³ *Id.* at 13, 15 n.62.

¹¹⁴ *Id.* at 16-17.

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D. Access to Information That May Have Been Restricted by MOUs

In addition to complying with the requirements of Section 8 of the CEA and the Privacy Act, the Commission is also responsible for complying with the terms of MOUs entered into with other Federal agencies and with foreign regulators to share data to facilitate the work of the Commission. Many of the MOUs have restrictions limiting data access to Commission staff that "need to know" to perform the tasks specified in the MOU. For example, the Commission entered into an MOU with member agencies of the Financial Stability Oversight Council ("FSOC").¹¹⁴ The purpose of the MOU between CFTC and FSOC is to share data and information "in connection with or related to the functions and activities of the FSOC or the Office of Financial Research pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act"¹¹⁵ Under the terms of the MOU between CFTC and FSOC, the non-public information shared between the parties:

may be shared only with (i) officials and employees of a Receiving Party who have a need to know the information in the performance of their official work duties consistent with applicable law or (ii) an individual under the supervision of a Receiving Party who has executed a confidentiality agreement with the FSOC that continues in effect. All officials, employees, or individuals under the supervision of a Receiving Party with whom the Non-Public Information is shared must be advised of and, as a condition of receiving Non-Public Information, be bound by the terms of this MOU or the terms of the relevant confidentiality agreement, as applicable, and instructed to comply with all its terms.¹¹⁶

On the CFTC main network, the Commission aggregates access to position data, transaction data, financial risk data, and enforcement data, which may also include data received pursuant to an MOU. However, access to data within OCENet was not segregated and the data contained in OCENet may have included information that was received pursuant to an MOU.

CFTC Management requests that the OIG share any available data that may have been obtained by forensic review. We agree that the lack of segregated access to data within OCENet and the lack of automated controls may make forensic analysis difficult; however, as noted in the Draft Report, beginning in late 2011, ODT required individual user accounts and passwords.¹¹⁷

¹¹⁴ The other member agencies include: Department of Treasury, Board of Governors of the Federal Reserve System, Office of the Comptroller of the Currency, Bureau of Consumer Financial Protection, Securities and Exchange Commission, Federal Deposit Insurance Corporation, Federal Housing Finance Agency, National Credit Union Administration, Office of Financial Research, and four independent members. Memorandum of Understanding Regarding the Treatment of Non-Public Information Shared Among Parties Pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act, effective date Apr. 13, 2011.

¹¹⁵ *Id.*

¹¹⁶ *Id.* at art. 6.

¹¹⁷ DRAFT REPORT, at 10-11.

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E. Access to Non-Public Information

In addition to the requirements to maintain the confidentiality of Section 8 material, all employees of the agency are subject to the Commission's regulations regarding confidentiality of investigations. In pertinent part, "[a]ll information and documents obtained during the course of an investigation . . . shall be treated as non-public by the Commission and its staff . . ." ¹¹⁸ The data reported to the Commission as required to regulate markets is investigative information and falls under these provisions. ¹¹⁹ Release of investigative information is only permissible if (1) the Commission directs or authorizes the public disclosure of the investigation; (2) the information or documents are made public during the course of an adjudicatory proceeding; or (3) disclosure is required by the Freedom of Information Act. ¹²⁰

Additionally, all Federal government employees are subject to the ethics regulations which require Federal employees to maintain the confidentiality of non-public information received during the course of their employment. ¹²¹ The Commission has also codified regulations regarding the disclosure of information that provide: "[a] Commission employee or former employee shall not divulge, or cause or allow to be divulged, confidential or non-public commercial, economic or official information to any unauthorized person, or release such information in advance of authorization for its release."

Similar to the discussion above on Section 8, we agree that OCE economists employed at the Commission would properly have access to the non-public material; however, they have no authority to release non-public information to individuals outside the Commission. If the OCE economists' papers were written within the scope of their employment, the Commission would

¹¹⁸ 17 C.F.R. § 113.

¹¹⁹ In *Freeman*, the court found that Section 8 empowered the Secretary of Agriculture to investigate the operation of contract markets by requiring, through regulations, the filing of daily reports of commodity market transactions. 405 F.2d at 1331, 1341. The court noted the affidavits provided by the Secretary of Agriculture showed that material supplied by market participants was supplied with an understanding that the information would be confidential, and it was therefore in the Secretary's investigative powers to get voluntary cooperation. 405 F.2d at 1339-40. See also *Burton Register Co.*, 65 F.2d at 351-32 (finding Fourth Amendment prohibition against unreasonable searches inapplicable to regulations requiring reports and disclosures with respect to businesses affecting the public so long as such reports and disclosures were reasonably necessary to protect the public).

¹²⁰ 17 C.F.R. § 113.

¹²¹ "Whoever, being an officer or employee of the United States or of any department or agency thereof, any person acting on behalf of the Federal Housing Finance Agency, or agent of the Department of Justice as defined in the Antitrust Civil Process Act (15 U.S.C. 1311-1314), or being an employee of a private sector organization who is or was assigned to an agency under chapter 37 of title 5, publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information coming to him in the course of his employment or official duties or by reason of any examination or investigation made by, or return, report or record made to or filed with, such department or agency or officer or employee thereof, which information concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association; or permits any income return or copy thereof or any book containing any abstract or particulars thereof to be seen or examined by any person except as provided by law; shall be fined under this title, or imprisoned not more than one year, or both, and shall be removed from office or employment." 18 U.S.C. § 1905.

¹²² 17 C.F.R. § 40.735-5.

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have to approve the release of any non-public material. However, until this approval has been granted, it may be a violation of these provisions to release non-public information in any form, including peer review or outside workshops and seminars. As noted in Part II.B, some papers were submitted to jurors for peer review and others were written with co-authors who had no relationship with the Commission. However, the Draft Report does not make findings concerning whether the data was also submitted to the jurors or shared with co-authors who are not affiliated with the CFTC.

CFTC Management requests that the OIG share any existing forensic analysis and/or intelligence notes with respect to the OCE economists and their use of the data. CFTC Management will consider recommending additional action if it can be determined that data was improperly accessed or disclosed.

III. CFTC Review Process and Direction to Temporarily Suspend Publication Did Not Potentially Violate the First Amendment

The Draft Report finds that the decision to temporarily suspend publication potentially resulted in a First Amendment violation and partly based this finding on a determination that the OCE economists wrote papers as private citizens and not as part of their official duties.¹²² The Draft Report also incorrectly attributes the decision to temporarily suspend publication to the Deputy General Counsel for (b)(6), (b)(7) rather than to the Chairman.¹²⁴ Additionally, the Draft Report asserts that the agency may have engaged in prior restraint by implementing a review process and for the length of time review has taken, which we believe is not correct.¹²⁵ As set forth in greater detail below, we have reviewed the OIG's findings and believe that certain factual statements, legal analysis, and conclusions should be modified. Specifically, (1) it was the Chairman, not the Deputy General Counsel for (b)(6), (b)(7) who decided to suspend publication of the OCE research papers; (2) there are no potential First Amendment violations because the OCE economists who were employed by the CFTC were not private citizens; (3) the CFTC did not impose a prior restraint in implementing the review process, and the agency's process reflects the appropriate review standards; and (4) the OIG's application of the outside employment regulations is mistaken. CFTC Management requests that the Draft Report be revised accordingly.

A. Draft Report's Attribution of the Direction to Temporarily Suspend Publication

Paragraph 1 of the Draft Report notes that the Chairman's January 24, 2013 letter stated "I [the Chairman] have directed the CFTC staff to suspend the external publication of research conducted or supported by OCE." In fact, the Chairman's direction to cease publication is reiterated throughout the Draft Report:

¹²² DRAFT REPORT, at 20, 22.

¹²³ *Id.* at 14, 1, 20, and 31.

¹²⁴ *Id.* at 24.

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- "The Chairman stated that he had directed the CFTC staff to suspend the external publication of research conducted or supported by OCE . . ."¹²⁶
- "the Commission . . . prevented dissemination to the public of completed research," and "the Agency has not approved most of the economic research papers it decided to review in December 2012, and continues to prohibit new research publications and presentations."¹²⁷
- there is a section entitled "The Commission's Decision to Prohibit Publication of Completed Research . . ."¹²⁸ and
- "the Office of the Chairman in consultation with the [OCC] indefinitely suspended OCE publication and presentation activities."¹²⁹

CFTC Management agrees that the Chairman, acting for the Commission, suspended the publication of economic research papers during the pendency of the review, and he acted within the scope of his authority in doing so. However, the Draft Report elsewhere incorrectly attributes these actions to the Deputy General Counsel for (b)(6), (b)(7)(C).¹³⁰

Section 2(a)(6) of the CEA enumerates the Chairman's powers and functions. The Chairman has the statutory authority to carry out the agency's executive and administrative functions, which include supervision of personnel employed by the Commission, distributing work among the units in the Commission, as well as the use and expenditures of funds according to budgets and priorities approved by the Commission.¹³¹ Although the Chairman may delegate some of these functions, *see* CEA section 2(a)(6)(E), at no point did the Chairman delegate the functions to OGC, and all actions taken by OGC were taken under the Chairman's direction.

Because the Chairman clearly and repeatedly stated that he made the decision to suspend publication, and staff's subsequent actions were at his direction, and because the Deputy General Counsel for (b)(6), (b)(7)(C) does not have the authority to suspend publication of papers, CFTC Management agrees that the Draft Report be changed to eliminate any suggestion that the Deputy General Counsel for (b)(6), (b)(7)(C) was the decision maker. Specifically, CFTC Management requests that the OIG correct the Draft Report as described below:

Page ii: "On December 7, 2012, the assigned Deputy General Counsel, in consultation with the Chairman's Office, instructed the Chief Economist . . ." should be corrected to state "The Deputy General Counsel, acting on instruction from the Chairman's Office . . ."

¹²⁶ *Id.* at 4.

¹²⁷ *Id.* at 15.

¹²⁸ *Id.* at 20.

¹²⁹ *Id.* at 31.

¹³⁰ *Id.* at ii, vi, 1, 29, and 31.

¹³¹ 7 U.S.C. § 2(a)(6)(A).

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- Page iv: "However, the December 2012 instruction from the assigned Deputy General Counsel clearly prohibited all further publication and presentation . . ." should be changed to state: "However, the December 2012 instruction from the Chairman clearly prohibited all further publication and presentation . . ."
- Page 1: "At close of business on December 7, 2012, the assigned OGC Deputy General Counsel, in consultation with the Chairman's Office, directed the Chief Economist . . ." should be changed to state "At the close of business on December 7, 2012, the Deputy General Counsel, acting on instruction from the Chairman's Office, directed the Chief Economist . . ."
- Page 20: "As previously discussed, without regard to the content of the research papers prepared by OCE economists, the Deputy General Counsel for (b)(6), (b)(7) determined to bar publication . . ." should be corrected to state "As previously discussed, without regard to the content of the research papers prepared by OCE economists, the Chairman determined to suspend publication . . ."
- Page 31: "[t]he Office of the Chairman in consultation with the Office of the General Counsel indefinitely suspended . . ." should be corrected to state "[t]he Office of the Chairman indefinitely suspended . . ."

B. Draft Report First Amendment Analysis

The Draft Report suggests that the First Amendment protects the rights of economists employed by OCE to publish certain academic papers and that those rights were possibly infringed by both the temporary suspension directed by the Chairman and the review process implemented by the agency.¹²⁷ However, the OIG also acknowledges that "[f]ederal employees do not enjoy the same First Amendment Rights as private citizens."¹²⁸ In particular, the OIG acknowledges that the "First Amendment does not shield from discipline the expressions public employees make pursuant to their professional duties . . ."¹²⁹ Pointing to language in a 2006 Supreme Court decision, however, the OIG suggests that "whether the fact of public employment similarly alters the First Amendment rights of public employees engaged in speech related to scholarship or teaching" remains an open question.¹³⁰ Analyzing the "context" of the employment of OCE economists, the OIG determines that the independence OCE economists enjoy suggests their academic writings should be considered the same as those of a private citizen.¹³⁶ Specifically, the Draft Report notes that the OCE economists wrote their papers as private citizens because: (1) the OCE economists, in addition to their official duties, were hired to perform "independent academic research," as allegedly reflected in their position descriptions; (2) the Commission

¹²⁷ DRAFT REPORT, at 20, 23.

¹²⁸ *Id.* at 20 (footnote omitted).

¹²⁹ *Id.*

¹³⁰ *Id.* at 20-21 (referring to *Garcia v. Gaballas*, 547 U.S. 410 (2006)).

¹³⁶ *Id.* at 21-22.

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requires the economists to publish their research papers with a disclaimer that the views expressed do not represent the views of the Chairman, the Commission or staff; and (3) past OCE staff economic research has been published as official CFTC reports without disclaimers.¹²⁷ CFTC Management disagrees with these findings and conclusions. As explained in greater detail below, OCE economists appointed as either full-time employees or as either compensated or uncompensated consultants¹²⁸ wrote papers as part of their official duties; we disagree with the OIG's application of the above-referenced language in a 2006 Supreme Court decision to the First Amendment rights of government employees; and the inclusion of disclaimers does not reflect that the OCE economists wrote their papers as private citizens.

1. OCE Economists Are Federal Employees Who Wrote Papers as Part of their Official Duties

While the First Amendment provides a high degree of protection to publications by private citizens, the law is very different with respect to the writings of a government employee authored pursuant to and within the scope of his or her federal employment. Although "public employees do not surrender all of their First Amendment rights by reason of their employment," they are subject to significant constraints on their First Amendment rights not applicable to private citizens. *Garces v. Ceballos*, 547 U.S. 410, 417 (2006). In *Garces*, the Supreme Court concluded that "when public employees make statements pursuant to their official duties, the employees are not speaking as citizens for First Amendment purposes and the Constitution does not insulate their communications from employer discipline." *Id.* at 421. While the Court did not "articulate a comprehensive framework for defining the scope of an employee's duties," *id.* at 424, it did note that the "[t]he proper inquiry is a practical one," and that "listing of a given task in an employee's written job description is neither necessary nor sufficient to demonstrate that conducting the task is within the scope of the employee's . . . duties for First Amendment purposes." *Id.* at 424-25. Later courts have looked to an employee's job description, the duties they actually perform, and the subject matter of the speech to determine whether it falls in the scope of employment. See, e.g., *Dahlia v. Rodriguez*, 735 F.3d 1060, 1069, 1074 (9th Cir. 2013) (en banc).

In defining position descriptions of federal employees, the Office of Personnel Management ("OPM") has stated that:

¹²⁷ *Id.*

¹²⁸ CFTC Management notes that some OCE economists who drafted papers were not employees of the agency, but rather performed work under contracts. As contractors, they are not subject to the same limitations on their First Amendment rights as OCE economists appointed as either full-time employees or as either compensated or uncompensated consultants. This difference is reflected in the review process described above in Part I.H and below in Part III.C.2. While they are not subject to the same limitations on First Amendment rights as federal employees, their First Amendment rights are limited by choice in the terms of their contracts which may authorize review and agency pre-approval before publication.

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"[a] position description or 'PD' is a statement of the major duties, responsibilities, and supervisory relationships of a position. In its simplest form, a PD indicates the work to be performed by the position. The purpose of a PD is to document the major duties and responsibilities of a position, not to spell out in detail every possible activity during the work day." OFFICE OF PERSONNEL MGMT., *Frequently Asked Questions: Classification, What is a Position Description?*, <http://www.opm.gov/FAQS/CA.aspx?fid=42de8952-41ec-434a-ac7e-bb5ee8205ba&pid=c9d01f71-8380-4f87-88a4-3e26125f1205>.

However, OPM has also stated that "[i]n the event that a position changes, agencies must exercise original classification authority; that is, write a new position description which reflects new responsibilities, and classify accordingly." *Introduction to the Position Classification Standards* at 59 (Revised August 2009).

The position descriptions for CT-11, CT-13, and CT-14 research economists in OCE set forth the primary duties and responsibilities for each research economist position. Each of these position descriptions provide that "[t]he incumbent's responsibilities will include evaluating trading rules and practices for their competitive impacts on price discovery and immediacy. . . . Expert advice . . . will be used by the Commission's various divisions. Conducts research on topics within the scope of the Commission's policy agenda. . . . Apply econometric tools to market microstructure questions."¹²⁹

Further, the position descriptions for CT-13 and CT-14 research economists provide that: "the incumbent also participates in the planning and execution of special projects . . . (and) is expected to be prepared to present and review papers at professional meetings and conferences and to contribute to the literature in the field and identify the effects associated with implementing proposed standards, regulations and policies."¹³⁰ Additionally, the position descriptions for CT-15 research economists provide that: "the incumbent is expected to be sought out to serve on panels and to present and review papers at professional meetings and conferences, to contribute to the literature in the field. . . ."¹³¹

Under the First Amendment tests discussed above in *Garceri* and *Dahila*, the papers written by the OCE economists fulfill the economists' duties to "contribute to the literature in the field" as set forth in the CT-13 through CT-15 position descriptions. Accordingly, they qualify as federal employee speech made pursuant to their official duties. While the Draft Report asserts that the OCE economists were hired in part to perform "independent academic research,"¹³² that term appears nowhere in the position descriptions for the OCE economists, and none of the position descriptions authorized OCE economists to write "independent" academic papers as private

¹²⁹ CFTC Position Descriptions - Research Economist 600004, 600008, and 600009.

¹³⁰ CFTC Position Descriptions - Research Economist 600004 and 600008.

¹³¹ DRAFT REPORT, at 21.

¹³² *Id.*

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citizens on official government time.¹⁴³ Moreover, the papers were drafted using government time, resources, and data.¹⁴⁴ As noted in the Draft Report in a discussion of the development and use of OCENet by OCE economists:

Over time, inter-agency use appears to have dropped off, while internal use by OCE economists increased. As overall demand for OCENet grew, additional equipment was provided for its use. What began as approximately five desktops (and a server) grew to nearly twenty. The advantages of OCENet for research purposes were many: like any server, it stored data so that it did not need to be separately loaded onto the many desktops; it was faster, meaning that the manipulation and study of datasets could occur more quickly; and it contained unique programs for the manipulation of data. Additionally, it allowed OCE to bring on outside economists to do research while limiting access to the CPAC network.¹⁴⁵

Significantly, Section 18 of the CEA does not call for "independent academic research."¹⁴⁶ It directs the agency to establish and maintain research and information programs that further the CFTC's mission and purposes of the CEA. OCE economists use government time, resources, and data to fulfill this statutory responsibility.¹⁴⁷ Additionally, consistent with the requirements of the Privacy Act, the Commission would only have been authorized to grant OCE economists access to records that might be Privacy Act protected for the performance of their official duties when necessary to accomplish an agency function.¹⁴⁸ As discussed in greater detail in Part II.C, there are no routine use exceptions to the Privacy Act that would allow the Commission to provide Privacy Act protected information to OCE economists acting in their capacity as private citizens.¹⁴⁹ Indeed, in accordance with the direction of Section 18 of the CEA, the subject matter of the papers — economics of commodity futures and related topics — falls squarely within the scope of the Commission's activities.

¹⁴³ As set forth in CFTC Position Descriptions — Research Economist 600094, 600093, and 600095, OCE economists are tasked with conducting research on topics within the scope of the Commission's policy agenda.

¹⁴⁴ *Id.* at 2 (noting that there was a dedicated server used by OCE to store trade data to facilitate its work and that the server was physically accessible by anyone with access to OCE's offices, but could only be used with a valid CFTC username and password); *id.* at 18 (noting the use of OCENet, its ability to run complex programs needed to analyze economic data, and noting that the advantages of OCENet included storage of data so that it was not loaded onto many desktops, ability to quickly manipulate and study data, and its unique programs for manipulation of data).

¹⁴⁵ DRAFT REPORT, at 10.

¹⁴⁶ *Id.* at 21; cf. 7 U.S.C. § 22.

¹⁴⁷ As discussed in Part II.A., it is important to note that, while Section 18 requires the CFTC to conduct economic research and thus provides support that the OCE economists wrote papers as part of their official duties, Section 18 does not compel or require the CFTC to publish research in academic or professional journals.

¹⁴⁸ Privacy Act of 1974; Notice, Publication of the Systems of Records Managed by the Commodity Futures Trading Commission, 76 Fed. Reg. 3,974, 3,975 (Feb. 2, 2011).

¹⁴⁹ The Commission published nineteen routine uses applicable to Commission systems of records. Privacy Act of 1974; Notice, Publication of the Systems of Records Managed by the Commodity Futures Trading Commission, 76 Fed. Reg. 3,974, 3,974-76 (Feb. 2, 2011).

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Finally, it is CFTC Management's view that the OCE economists wrote papers as part of their official duties because they were subject to supervision by other CFTC employees. The Chairman has delegated supervisory authority over most agency staff to various heads of offices who also, in turn, have delegated supervisory authority to other CFTC employees.¹⁵⁰ The position descriptions for the OCE economists reflect these supervisory delegations. For example, the position descriptions for the CT-11, CT-12, and CT-14 OCE economists provide that the supervisor for these OCE economists was the Supervisory Economist.¹⁵¹ The position description for the CT-11 research economist also states that "[t]he incumbent acts under the general supervision and policy guidance of the Chief Economist . . . keeps the supervisor informed of progress and potentially controversial problems concerns, and issues . . . The supervisor reviews completed work for soundness and overall approach, adherence to requirements, achievement of expected results, and the feasibility of recommendations."¹⁵² That the OCE economists wrote the papers as part of their official duties is further supported by the fact noted in the Draft Report that "[t]he Chief Economist approved all topics for economic research papers written by OCE economists working as employees, contractors and consultants."¹⁵³

The above facts foreclose any claim that the papers written by OCE economists are entitled to the First Amendment protections applicable to private speech.¹⁵⁴ See *Dickia*, 735 F.3d at 1074-75. Just like the plaintiff in *Garrett*, OCE economists were expected to and did conduct research and draft papers as part of their official duties. See 549 U.S. at 416. Accordingly, under the "perpetual" scope of employment analysis laid out in *Garrett*, these duties should be dispositive. OIG's contrary analysis is mistaken.

In light of the above, CFTC Management disagrees with the OIG's conclusion that the OCE economists wrote papers as private citizens.¹⁵⁵ CFTC Management requests that the OIG correct the Draft Report to reflect the actual status of the OCE economists, specifically that they were brought on to write papers as part of their official duties and therefore, did not write the papers as private citizens.

2. OCE Economists Not Afforded "Academic Freedom" Protection Under *Dickia* in *Garrett*

As noted above, the OIG misapplies a statement in *Garrett* to suggest that there is an open question as to whether OCE economists receive First Amendment protection based on concerns regarding academic freedom.¹⁵⁶ In that case, the Supreme Court held that the First Amendment did not protect a government employee from discipline based on a speech the employee made in the course of his official duties. 547 U.S. at 424. A dissenting opinion expressed concerns that

¹⁵⁰ 7 U.S.C. § 2(a)(6).

¹⁵¹ CFTC Position Descriptions - Research Economist 600004, 600008, and 600009.

¹⁵² CFTC Position Description - Research Economist 600009.

¹⁵³ DRAFT REPORT, at 11.

¹⁵⁴ *Id.* at 21-22.

¹⁵⁵ *Id.* at 21.

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the majority's ruling would undermine "academic freedom in public colleges and universities." *Id.* at 438 (Souter, J. dissenting). The majority responded by commenting that "[t]here is some argument that expression related to academic scholarship or classroom instruction implicates additional constitutional interests." *Id.* at 425. It specified, however, that it "need not, and for that reason d[id] not, decide whether [its] analysis would apply in the same manner to a case involving speech related to scholarship or teaching." *Id.* Some lower courts have agreed that an academic context requires additional protections, but they have extended basic First Amendment protections only in cases involving state-run colleges and universities. See *Demers v. Austin*, 729 F.3d 1011, 1019-20 (9th Cir. 2013); *Adams v. Trs. of the Univ. of N.C.-Wilmington*, 840 F.3d 550, 562 (4th Cir. 2011) ("We are persuaded that *Garcetti* would not apply in the academic context of a public university as represented by the facts of this case.").

The context here is very different. OCE economists are hired to serve the needs of the Commission, an independent federal agency charged with regulating the futures and swaps markets. OCE economists have access to sensitive Commission data, which is protected by Section 8 of the CEA and the Privacy Act, among other laws.¹⁵⁶ Section 1d of the CEA makes clear and as the Draft Report acknowledges, this research is conducted to further the mission of the CFTC.¹⁵⁶ Based on these factors, CFTC Management concludes that papers produced by OCE economists to further the statutory mission of the CFTC differ materially for purposes of First Amendment analysis from that of research conducted at public colleges and universities.

Even if the Supreme Court were to follow the lower courts' view based on *Garcetti* that scholarship and teaching may be entitled to some First Amendment protection, it would likely not extend it to federal employees serving federal agencies charged with implementing federal law. However, even if the courts were to analogize OCE economists' research to that of academics at public universities for First Amendment purposes, their work would still be subject to considerable Commission regulation and oversight. In order for the First Amendment to protect these public employees from such oversight, their speech must be addressed to "matters of public concern." *Demers*, 729 F.3d at 1020 (citing *Pickering v. Bd. of Ed.*, 391 U.S. 563, 568 (1968)), and the gravity of that concern must outweigh "the interest of the [government], as an employer, in promoting the efficiency of the public services it performs through its employees." *Id.*; see also *Garcetti v. Shelby Cnty. Sch. Dist.*, 270 F.3d 1036, 1046 (6th Cir. 2001). If this First Amendment protection were applicable here, the Commission's review process would strike the appropriate balance. This is because most of the research is developed through access to, and use of, proprietary Commission resources, the research conducted must be to discharge Commission duties, and the Commission must ensure that its employees comply with applicable laws and regulations, such as Section 8. The Commission's review process as described in Part III.C.2. serves the public interest in promoting the efficiency and propriety of the public services

¹⁵⁶ *Id.* at 7-9 (economic research activities, generally under OCE, have been described in nearly every annual Commission report; the CFTC's public-facing website indicates OCE conducts economic research, and OCE lists accomplishments such as seven working, 25 presentations, and three publications).

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it performs by ensuring that its resources, including sensitive data, are being used only for Commission-authorized purposes. Thus, notwithstanding that the analogy to academics and public universities is inapt, the Commission's actions and review process would satisfy that standard as well.

In light of the above, CFTC Management requests that the Draft Report be changed to correctly reflect *Garcetti* and other relevant First Amendment case law, which do not confer First Amendment protection on economic research conducted by federal employees pursuant to their official duties.

3. Use of Disclaimers by OCE Economists Does Not Confer Private Citizen Status

In the Draft Report, the OIG stated that the use of disclaimers by OCE economists and the omission of disclaimers in economic research published by the Commission support the conclusion that OCE papers are written by OCE economists as private citizens.¹⁵⁷ Specifically, the OIG noted that Commission employees are required to include disclaimers in their papers providing that "their views do not represent those of the Chairman, the Commission or its employees."¹⁵⁸ Further, the OIG stated that the Commission is "fully aware . . . that economic research papers published under a disclaimer are done so because the author is publishing not as a Commission employee voicing official CFTC policy or opinion, but as a private citizen."¹⁵⁹ We disagree with the OIG's findings regarding the significance of disclaimers in papers written by OCE economists.

Federal agencies routinely require employees to use disclaimers both when an employee is acting in his or her private capacity and when he or she is acting in an official capacity. In the case of an employee who has written a paper in his or her personal capacity for publication in a scientific or professional journal, the ethics regulations on outside employment require the individual to include a disclaimer to indicate that the views expressed in the paper are personal and not attributable to the employing agency. *Standards of Ethical Conduct for Employees of the Executive Branch* ("Standards of Conduct"), 5 C.F.R. § 2635.807. Specifically, the Office of Government Ethics ("OGE") has said that when an employee is acting in a private capacity, "[t]o the extent that it enhances the employee's opportunities or furthers the interests of the employer, sponsor or publisher, use of the employee's official title or position creates at least an appearance of use of public office for private gain and may inappropriately suggest Federal endorsement or sanction of the activity." 56 Fed. Reg. 33,278, 33,791 (July 23, 1991); see also 5 C.F.R. § 2635.701 et seq.

It is also common practice for federal agencies to require that an employee use a disclaimer when he or she is acting in his or her official capacity so that his or her views do not act to bind an

¹⁵⁷ *Id.* at 22.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

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agency regarding a particular issue or matter. The disclaimer also ensures that agency employees do not inadvertently misrepresent an agency's official position on a particular issue or matter. For example, the U.S. Securities and Exchange Commission ("SEC") requires its employees to include a disclaimer when speaking publicly in their official capacity. See *CFTC Global Markets Advisory Committee Transcript*, at 34 (Nov. 7, 2012).¹⁶⁰ Similarly, the U.S. Department of Defense ("DoD") asks staff to include disclaimers when they speak in their official capacity. *Speaking in your Official Capacity*, U.S. DEP'T OF DEF., at 1 (Jan. 13, 2010).¹⁶¹ Further, a number of federal agencies and departments use disclaimers on their websites. For example, the Department of Veterans Affairs' website disclaimer reads as follows: "The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government, and shall not be used for advertising or product endorsement purposes." *Website Policies and Other Important Links*, U.S. DEP'T OF VETERANS AFFAIRS, <http://www.va.gov/disclaim.htm>.

It is, moreover, the Commission's consistent practice to require similar disclaimers. For example, Commission issuances, including no-action letters, staff advisories, and frequently asked questions contain a disclaimer to this same effect.¹⁶² This disclaimer could never be construed to support an argument that those documents are outside the scope of the signatories' duties or were written by Commission employees acting as private citizens. Without a disclaimer, it is possible that a research paper could be viewed as binding on the Commission. While the Commission may wish to adopt a particular article as the view of the Commission and direct that it be published in an official Commission publication,¹⁶³ that does not mean that in the absence of such a decision that OCE economists are acting as private citizens rather than Commission employees when the Commission declines to do so and requests that they use a

¹⁶⁰ At the October 2012 CFTC Global Markets Advisory Committee, an SEC employee who was invited to speak in his/her official capacity on the SEC's activities related to cross border rulemakings and guidance stated the following: "Before I go any further, I need to state that as a matter of policy the SEC disclaims responsibility for statements like this by SEC employees. So, the views I express today are my own and do not necessarily reflect the views of the SEC, the Commission or my colleagues on the Commission staff." *Transcript of Record at 34, CFTC Global Mkts. Advisory Comm.*

¹⁶¹ DoD employees are advised to proceed as follows when speaking in their official capacity: "Even if you are properly authorized to speak or make a presentation at an event sponsored by a non-Federal entity, you should begin your remarks with a disclaimer to the effect that 'the views I am about to express are my own and do not necessarily represent the views of the Army or the DoD.' . . . The only occasion on which you need not make such a disclaimer is if the head of the DoD Component command or organization authorizes you to present information as the 'Army's position.' Presenting information as the 'Army's position' is not necessarily the same thing as speaking in your official capacity. The Army has not established a 'position' on each and every matter or issue about which you might be invited to speak. Unless you are absolutely certain that the views you intend to express in your speech or presentation accurately reflect the formally established position of the U.S. Army, and you have been specifically authorized to relate that formally established position in a public forum, you should begin your remarks with the disclaimer set forth above. Again, please be mindful of the fact that one may be authorized to speak in an official capacity even though not authorized to represent the Army's official position on a matter." *Speaking in your Official Capacity*, U.S. DEP'T OF DEF., at 1 (Jan. 13, 2010).

¹⁶² See e.g. Inv. Co. Inst. & Sec. Index and Fin. Mkt. An'n, CFTC No-Action Letter No. 13-51 (Sept. 5, 2013), available at <http://www.cftc.gov/ucm/groups/public/@infoletter/content/documents/letter13-51.pdf>

¹⁶³ DEAPP REPORT, at 22.

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disclaimer when publishing a paper written as part of their official duties. Accordingly, CFTC Management disagrees with the OIG's finding that disclaimers mean that OCE economists' papers are written by them as private citizens.¹⁵⁴

In light of the above, CFTC Management requests that the Draft Report be changed to reflect that use of a disclaimer does not mean that the OCE economists wrote the papers as private citizens.

C. Prior Restraint Analysis

1. CFTC Review of Papers Does Not Constitute a Prior Restraint

The OIG has also raised concerns that the paper review process may violate the First Amendment's prohibition on prior restraint of publication.¹⁵⁵ After reviewing the law of prior restraint as it applies outside the employment context, the Draft Report suggests that even pre-publication review is problematic under the First Amendment.¹⁵⁶ The Draft Report proceeds from the assumption that "[t]he government clearly may require prior submission of a public employee's speech as a *private citizen* if the government can demonstrate sufficient interest in staying informed of public employees' public statements about matters of concern to the workplace."¹⁵⁷ However, for the reasons given above, CFTC Management disagrees with the OIG's conclusion that OCE economists are speaking as private citizens rather than government employees speaking pursuant to their official duties.¹⁵⁸ As explained above, because OCE economists used Commission time, resources, and confidential data, and because they were expected to produce research on matters pertinent to the Commission and its statutory mission, any research they authored was pursuant to their official duties. As such, it is not protected by the First Amendment, and regulating or reviewing that speech is not a prior restraint. *Samuelson v. LaPorte Community School Corp.*, 336 F.3d 1046, 1051-52 (7th Cir. 2008); *Moonin v. Nevada*, ____ F. Supp. 2d ____, 2013 WL 1628389 at *5 (D. Nev. Apr. 15, 2013); *Hawkins v. Dist. of Columbia*, 928 F. Supp. 2d 128, 135-36 (D.D.C. 2013).

Even assuming some First Amendment protection would apply to work performed by OCE economists pursuant to their official duties, the prior restraint analysis still favors the government because the OCE economists are government employees. As the Supreme Court has recognized, the government "may impose restraints on job-related speech of public employees that would be plainly unconstitutional if applied to the public at large." *U.S. v. Nat. Treasury Emps. Union*, 513 U.S. 454, 465 (1995) ("*NTEU*"). To determine whether a restriction on the speech of government employees is a prior restraint that violates the First Amendment, courts "arrive at a

¹⁵⁴ *Id.*

¹⁵⁵ *Id.* at 22-23.

¹⁵⁶ *Id.* at 22-26.

¹⁵⁷ *Id.* at 25 (emphasis added).

¹⁵⁸ We believe the OIG's statement that the Commission has a clear interest in being apprised of OCE economists' scholarship before it is presented or published is correct. *Id.* at 23.

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balance between the interests of the [employee], as a citizen, in commenting upon matters of public concern and the interest of the State, as an employer, in promoting the efficiency of the public services it performs through its employees.” *Harman v. City of New York*, 140 F.3d 111, 117 (2nd Cir. 1998) (quoting *Pickering v. Bd. of Educ. of Twp. High Sch. Dist.*, 391 U.S. 563, 568 (1968)). In conducting this inquiry, as the OIG correctly notes, courts must ensure that a regulation’s sweep is “reasonably necessary to protect the efficiency of the public service.” *Weaver v. U.S. Information Agency*, 87 F.3d 1429, 1439 (D.C. Cir. 1996) (quoting *NTEU*, 513 U.S. at 474); see also *Lafino Officers Ass’n v. Supr.*, 170 F.3d 167, 172 (2d Cir. 1999).

Using this analysis, courts have upheld regulatory schemes that involve pre-publication review of government employees’ personal writings. In *Weaver*, the U.S. Information Agency required pre-publication review of “[a]ll speaking, writing, and teaching materials which may reasonably be interpreted as relating to the current responsibilities, programs, or operations of any employee’s agency or to current U.S. foreign policies, or which reasonably may be expected to affect the foreign relations of the United States.” 87 F.3d at 1435 (quoting F.A.M. § 628.2).¹⁰ Because the regulation did not forbid speech, the court found that it “clearly passes muster.” *Id.* at 1440. The court noted that the primary burden on a speaker was the delay associated with submitting to the review process, *id.* at 1441, but explained that because government employees enjoy lesser First Amendment protections, the pre-publication review was constitutional even though there was “no specific limit on the duration of the review process.” *Id.* at 1443. In approving this prepublication review, the court noted that the government’s interest in taking corrective action before the unauthorized disclosure of “sensitive material” is an important factor supporting pre-publication review. *Id.* at 1443. On the whole, the court concluded that the pre-publication review program “restrict[ed] no more speech than is reasonably necessary to achieve the government’s interests.” *Id.* at 1443 (quotation marks and citation omitted).¹¹

Weaver is hardly an outlier. The Second Circuit similarly upheld a New York Police Department policy requiring all employees to give notice before testifying or making a statement before a private organization that includes: (1) written notification of the appearance; and (2) a summary of the testimony or statement. *Lafino Officers Ass’n*, 170 F.3d at 168-69, 172. Noting the City’s “strong interest” in “staying informed of police officers’ public statements about the Department,” the court found that the notice and reporting procedure “strikes a reasonable balance.” *Id.* at 172. Similarly, a court upheld a Metropolitan Police Department Regulation: (1) prohibiting officers from discussing Department “policies, procedures, rules, personnel issues and direction”; and (2) requiring approval from a supervisor before providing “basic facts” to the

¹⁰ During the course of the litigation, the agency construed the regulation as not “authoriz[ing] any form of punishment for publication of material disapproved by the agency, so long as it was submitted for review beforehand.” 87 F.3d at 1435. The agency was free to discipline employees for publishing materials in violation of the law or other agency policies. *Id.* at 1436, 1442 n.5.

¹¹ As the OIG notes, the CIA has a robust pre-publication review procedure that the Supreme Court has upheld. *Snapp v. U.S.*, 444 U.S. 507 (1980). The Court noted the importance of protecting classified information, but explained that the government may protect other “substantial government interests” by restricting the free speech rights of government employees. *Id.* at 510 n.3. See DRAFT REPORT, at 24, 24 n.100-102.

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public. *Hawkins*, 923 F. Supp. 2d at 135-36. Finding that these restrictions went to speech made pursuant to official duties, the court found that they passed constitutional muster. *Id.* at 136.¹⁷¹

When compared to and analyzed under these cases, the Commission's review program is consistent with the First Amendment and does not act as a prior restraint. As in *Weaver*, the review program is not intended to, nor has it operated to, prevent speech. Rather, as the OIG notes, the review is used to review papers "for information protected under Section 8 [of the CEA], and for other confidential or sensitive information."¹⁷² This purpose is broadly similar to the prepublication review program upheld in *Warner* and significantly less restrictive than the review program at issue in *Hawkins*, among other things, because economists are not inhibited in their ability to comment on Commission policy.¹⁷³ Thus, any potential chilling effect the review program has on speech is more than outweighed by the Commission's interest in preventing the publication of information protected under Section 8 and/or other confidential or sensitive information. *Cf. Weaver*, 87 F.3d at 1442-43 (reaching a similar conclusion with State Department prepublication review).

We also do not agree with the OIG's concern that the length of the review process may infringe the OCE economists' First Amendment rights.¹⁷⁴ The D.C. Circuit upheld a prepublication review program that had "no specific limit on the duration of the review process." *Weaver*, 87 F.3d at 1443. The court explained that although this could be a fatal flaw outside the employment context, less demanding standards apply to regulating the speech of government employees. *Id.* Accordingly, the court rejected the idea that prior review in the employment context must proceed under a pre-set time limit.¹⁷⁵ *Id.* The delay in the review of papers is not a prior restraint because the December 7, 2012 email was never intended to be a permanent prohibition on paper clearance; it was intended only to temporarily halt the process pending OCE Management and OIG review. Importantly, this initial delay was the result of standing up the paper review process in light of the significant issues identified by the agency's review of the concerns expressed by CME. Moreover, the ongoing review of papers involves analysis of sensitive and complex data.¹⁷⁶ staffing has been difficult in light of other pressing Commission business, see Part III.C, and CFTC Management had to determine how the review process should coexist with the OIG's ongoing investigation, before any findings about the problems identified

¹⁷¹ In addition, the court concluded that the Department's more limited regulation of personal speech was also permissible; the Department could require that personal views be expressed "off-duty and offsite" and be prefaced with "a clear statement" that all views were personal. *Hawkins*, 923 F. Supp. 2d at 136. Similarly, the Department was permitted to require that officers expressing personal views not wear "a uniform or police insignia" and that they not endorse any products or services. *Id.*

¹⁷² DRAFT REPORT, at iii.

¹⁷³ While prior restraint is not an issue with regard to OCE economists who were employed by the agency, it is possible that prior restraint concerns would arise with regard to individuals who may have had deficient appointment paperwork. Even those OCE economists who were not properly appointed, however, may have signed a non-disclosure agreement under which they agreed to pre-publication review.

¹⁷⁴ DRAFT REPORT, at v ("The length of time Agency management has taken to review and approve economic research papers is not acceptable.")

¹⁷⁵ See Part I.B, Part III.2, and Part IV.E, for further discussion of the paper review process.

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had been made.¹⁷⁶ Thus, the Commission's review program passes constitutional muster on the timeliness front as well, even assuming papers written by OCE economists in an official capacity would receive First Amendment protection.¹⁷⁷

In light of the above, CFTC Management requests that the Draft Report be changed to correctly reflect relevant case law on prior restraint and to note that the Commission's review program is consistent with the First Amendment and does not act as a prior restraint.

2. CFTC Review of Papers Reflects Appropriate Standards of Review

As briefly discussed in Part I.H above, the Commission has discretion to determine the review process for papers written by the OCE economists, and the review standard turns on the author's status as a full-time or limited-term employee, contractor, or individual with no official status with the agency.¹⁷⁸ For an employee who wrote the paper as part of his or her official duties, the discretion derives from the following: (1) the papers were produced using government time, resources, and information and by OCE economists who were subject to CFTC supervision; (2) as government work product, the papers are not eligible for protection under U.S. Copyright law;¹⁷⁹ and (3) except in limited circumstances, government employees voluntarily restrict their ability to exercise free speech when they accept public employment.

It is important to note, however, while the review process is within the Commission's discretion, this discretion must be exercised consistently with Federal laws and regulations restricting the release of government information. As part of the review process, before a paper is cleared, the Commission must confirm whether the OCE economist received any supplementation of salary

¹⁷⁶ See Part I.H. for a discussion of the paper review process established and implemented by the agency; of Draft Report, at 4 (noting OIG was encouraging prepublication review during its investigation).

¹⁷⁷ Additionally, OIG has assigned additional attorneys to the review of papers and these additional reviewers will speed legal review and clearance of the papers. See Part I.H. Nine papers are currently under active review in the OIG and the OIG anticipates that 5 papers will be cleared in the next two weeks.

¹⁷⁸ Some of the individuals in the OCE research program who wrote OCE research papers were employed pursuant to agreements under the Intergovernmental Personnel Act (IPA) of 1970, 5 U.S.C. §§ 3371-3375 et seq. The IPA provides for the temporary assignment of personnel between the Federal Government and state or local governments, institutions of higher education, and other eligible organizations. Individuals serving under IPA agreements are treated as federal employees under statutory authority pursuant to the IPA and they are bound by the ethics regulations of 5 U.S.C. § 2374(c)(2). Consistent with this, those individuals serving under IPA agreements who also wrote papers are subject to the review standards for Commission employees set forth in Part I.H. of this report. Additionally, the Commission should review an individual's IPA agreement to confirm compliance with any additional terms and conditions prior to publication of his or her paper. The individual's employing agency or institution also may wish to review the paper or have input into any disclaimer before final clearance and publication.

¹⁷⁹ The Copyright Act of 1976, as amended, 17 U.S.C. § 101 et seq., defines government work product as "a work prepared by an officer or employee of the United States Government as part of that person's official duties." 17 U.S.C. § 101. The Act further states that "copyright protection is not available for any work of the United States Government." 17 U.S.C. § 105. Based on the language in these sections, it is clear that when a work is prepared by a government employee, including experts or consultants, using government time, resources, and/or information, the employee cannot claim copyright in the work product. Accordingly, the Commission has control over the work product as well as discretion regarding the review standard required to permit disseminating the papers outside the agency.

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prohibited by 18 U.S.C. § 209, whether the research falls under one of the Commission's statutory research purposes in Section 18 of the CEA, and whether the disclosure is consistent with the Privacy Act of 1974, 5 U.S.C. § 552a. Additionally, the Commission must review the papers for compliance with (1) Section 8 of the CEA; (2) 18 U.S.C. § 1905, which prohibits agency officers or employees from disclosing various forms of confidential government information, including trade secrets, processes, operations, statistical data, etc.;¹⁰⁰ and (3) Commission regulations that prohibit current and former Commission employees from disclosing or causing or allowing the disclosure of "confidential or non-public commercial, economic or official information to any unauthorized person, or release such information in advance of authorization for its release." 17 C.F.R. § 140.735-5.

While most, if not all, of the papers written by OCE economists are written pursuant to their official duties, if an OCE economist writes an economic research paper on their own time and without using CFTC data or resources, then the paper would be written in their personal capacity. The authority and the standard for the review of papers written by employees, consultants, or experts in their personal capacity is based on the *Standards of Conduct*, 5 C.F.R. § 2635, the Commission's supplemental regulations on outside activities which include uncompensated writing, 5 C.F.R. § 5101.103, and the regulations on the "Conduct of Members and Employees and Former Members and Employees of the Commission." 17 C.F.R. § 140.735-1-8.¹⁰¹ Finally, before the paper is cleared for publication, the Commission would also need to review the papers for compliance with Section 8 of the CEA, the Privacy Act and Commission regulations on the disclosure of information.

For papers written by contract OCE economists, the authority and standard for Commission review is derived from the terms of individual contracts and agreements and the CEA restrictions

¹⁰⁰ See *supra* note 120. The *Standards of Conduct*, 5 C.F.R. § 2635, also prohibits an employee from improperly using "nonpublic information to further his own private interest or that of another, whether through advice or recommendation, or by knowingly unauthorized disclosure." 5 C.F.R. § 2635.703(a).

¹⁰¹ In the case of Commission employees, or experts or consultants who wrote papers in their personal capacity, OGC, as the office that runs the agency's ethics program, would need to determine the following:

- i. Whether the individual received compensation for the paper, 5 C.F.R. § 2635.807(a);
- ii. Whether an individual used official time and resources to write the paper, 5 C.F.R. § 2635.807(a)(2)(i)(A);
- iii. Whether the invitation to write the paper was extended to the author primarily because of his official position rather than his expertise on the particular subject matter, 5 C.F.R. § 2635.807(a)(2)(i)(B);
- iv. Whether the invitation to write the paper was extended to the individual by an individual or entity who has interests that may be substantially affected by the performance or nonperformance of the individual's official duties, 5 C.F.R. § 2635.807(a)(2)(i)(C);
- v. Whether the individual or entity providing any compensation has interests currently pending before the CFTC, 5 C.F.R. § 2635.101(b)(8);
- vi. Whether the paper draws substantially on ideas or official data that are CFTC nonpublic information as defined in 5 C.F.R. § 2635.703(b) and 5 C.F.R. § 2635.807(a)(2)(i)(D); and
- vii. Whether the paper relates to any ongoing CFTC program, policy or operation of the CFTC, 5 C.F.R. § 2635.807(a)(2)(i)(E)(2).

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on the release of Section 8 information.¹⁶² Pursuant to the requirements of the Federal Acquisition Regulations ("FAR") as implemented in the contracts for economic research, the agency has the authority to review the contractor's performance under a contract and to ensure each specific paper written under a contract complies with the contract's terms. The responsibility to inspect and accept contract deliverables (in this case the research paper) under the contract is often reserved to the agency's Contracting Officer's Representative. Since most contracts include provisions regarding access to, handling of, and disclosure of sensitive, confidential, non-public, or otherwise protected information,¹⁶³ the paper review process will ensure that the contractor did not disclose protected information during the performance of the contract and through the publication of the paper.¹⁶⁴ In addition, as noted earlier, all papers must be reviewed for compliance with Section 8 of the CEA and the Privacy Act.

¹⁶² The OIG contends that some OCE economists who performed work on validly executed contracts had authority to perform independent research on topics that were not specified under contract. Draft Report, at 11, 21-22. Specifically, the Draft Report states that "[s]ome contract employees in OCE are hired solely to perform independent research on topics approved by the Chief Economist." *Id.* at 22, n.90. Therefore, according to the OIG, certain OCE economists working under contract had authority to perform research on topics of their own choosing even where those topics were not identified under the contract in question. *Id.* at 11, 15, 21, 32.

CFTC Management submits that this assertion is flawed because there is no authority under the FAR for contractors to perform work of any kind which is not specifically identified within the contract. More specifically, there is no authority under the FAR or case law for the OCE contracting economists to perform independent research on topics that are not specifically outlined in the statement of work for the respective contract. It is a fundamental tenet of government contracts law that contractors are to perform the tasks that are specifically described in a statement of work. A statement of work must specify in clear, understandable terms the work to be done in developing or producing the goods to be delivered or services to be performed by a contractor. Contractors, such as OCE economists, would have no right or authority to independently research random topics of interest because they only have authority to research and write on topics that were specifically identified in the statement of work in the contract. Likewise, the CFTC could not direct the OCE economists to perform work that is not specifically identified in the contract. Consequently, there is no case law or FAR provision to support the OIG's assertion that the OCE contract economists could perform independent economic research on topics that were not identified under contract.

CFTC Management requests that the Draft Report be changed to correctly reflect the requirements of the FAR in any discussion of OCE economists under contract.

¹⁶³ In addition to the confidentiality provisions contained in the OCE research contracts, many contractors working for OCE signed additional NDAs. As part of the review process, the Commission must review compliance with the NDA as well as the terms of the contract.

¹⁶⁴ Most of these contracts for economic research reviewed by OGC contained a section titled "Non-Disclosure of Confidential Information." For example, the "Non-Disclosure of Confidential Information" section of CFTC contract (b)(6), (b)(7) for economic research, specifically states that:

"...the Contractor agrees to use confidential information only for the purposes of performing work under this task order, and to otherwise hold such information confidential. The Contractor shall not directly or indirectly use or allow the use or access to confidential information for any purpose other than that directly associated with officially assigned duties, and shall not, either by direction, action or by counsel, discussion, recommendation or suggestion to any third party, reveal the nature or content of any confidential information.

(c) If disclosure of confidential information to a third party is determined to be necessary by the Commission, the Contractor shall first obtain written authorization from the Contracting Officer prior to disclosing the confidential information. The Contractor shall continue to comply with this clause after expiration of the task order."

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For individuals who have no status with the agency because they either did not have the appropriate appointment paperwork or a valid contract, the scope of the agency's ability to require a review of the research paper is dependent on whether the individual with no status signed a non-disclosure agreement ("NDA"). If the individual signed an NDA, the Commission would have authority to review any papers written by that individual that used CFTC data and information, and the review would be conducted consistent with the terms of the NDA, which includes review for Section 8, confidential, and Privacy Act information.¹⁵⁷ On the other hand, if the individual with no official status did *not* sign an NDA, the Commission would have limited authority to request the right to review any papers and would only be able to review the papers for compliance with Section 8 and the Privacy Act.

In light of the above, CFTC Management requests that the Draft Report include a discussion of different standards of review appropriate for employees acting in their official capacity, employees acting in their personal capacity, contractors, and individuals with no status. CFTC Management requests that the Draft Report reflect that the agency appropriately takes into account the status of an individual in the paper review process.

D. Draft Report Analysis of OGE Ethics Regulations and CFTC Outside Employment Regulations

The Draft Report states that the OGE has recognized that an agency's prior review and approval of a Federal employee's publication "risks violating the First Amendment."¹⁵⁸ Specifically, the OIG notes that OGE proposed a regulation requiring agency review and approval of "the content of any speech, book, article, or similar product."¹⁵⁹ However, after receiving comments about this rule potentially violating the First Amendment, OGE revised the rule to include a note stating that some agencies may require advance review or approval of certain books, speeches, etc. to determine whether they disclose nonpublic information, contain an appropriate disclaimer, or otherwise comply with the ethics regulations on outside employment.¹⁶⁰ The Draft Report does not consider, however, that OGE's proposed regulation applied to all writing performed by an employee regardless of whether it was completed in the employee's personal or official capacity. Nothing in OGE's regulations suggests that there is any First Amendment concern with reviewing employee writing completed in an official capacity.

We also do not agree with the Draft Report's reliance on OGE and CFTC regulations on outside employment. The Draft Report contrasts the treatment of publications and outside employment, noting that CFTC's supplemental ethics regulations do not require employees to submit and

¹⁵⁷ It is a common and longstanding practice for the Commission to require non-CFTC affiliated individuals who are present at briefings and presentations that contain Section 8 information to sign NDAs that limit their ability to remove and use the information. See, e.g., Request for Information Confidentiality and Non-Disclosure Agreement Between California Air Resources Board and the CFTC (Jan. 2013).

¹⁵⁸ Draft Report, at 25.

¹⁵⁹ *Id.* (footnote omitted).

¹⁶⁰ *Id.*

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receive approvals of publications, but that they do require prior approval for outside employment.¹⁸⁵

We believe, however, that the Draft Report's application of OGE's and the Commission's outside employment regulations is incorrect. Both of these sets of regulations apply when an employee performs work in his or her personal capacity; these regulations do not apply when the individual is performing work as part of his or her official duties.¹⁸⁶ See OGE's Outside Employment Regulations, 5 C.F.R. § 2635.801(a) ("This subpart contains provisions relating to outside employment, outside activities . . .") and § 2635.807; CFTC's outside employment regulations, 5 C.F.R. § 51.01.103(c)(1) ("Before engaging in any outside employment, without or without compensation, an employee of the Commission, other than a special Government employee, must obtain written approval from his or her division or office head and the Executive Director, who may seek the concurrence of the General Counsel.")

CFTC Management requests that the OIG revise the Draft Report's discussion of the outside employment regulations by removing it from the Prior Restraint section of the Draft Report.

IV. Errors in Administrative Paperwork

The Draft Report notes in several places that "errors" were identified in the administrative paperwork for many of the OCE economists.¹⁸⁷ The discovery by CFTC Management of these errors, together with other concerns, led to the Chairman's referral of this matter to the OIG, and CFTC Management agrees with the OIG's conclusion that the "onboarding problems were in a volume that indicated a more than trivial problem in recordkeeping . . ."¹⁸⁸ The Draft Report finds that there were administrative errors in employment records for OCE economists; incomplete paperwork amounted to an onboarding failure; onboarding errors were voluminous and indicated a more than trivial recordkeeping problem; and there was no simple explanation for the administrative errors.¹⁸⁹ However, the Draft Report also states that, because the

¹⁸⁵ *Id.* at 26.

¹⁸⁶ In several cases in 2012, OGC attorneys incorrectly required OCE economists who drafted papers in their official capacities to comply with CFTC supplemental regulations applicable to writing completed in an employee's personal capacity. E-mail from (b)(6), (b)(7)(C) to Andrei Kirilenko (Sept. 27, 2012) (Re: Paper for OGC Review for Compliance with Section 6, and Request for Approval of Outside Employment); and E-mail from (b)(6), (b)(7)(C) to Andrei Kirilenko (Nov. 1, 2012) (Re: Paper draft for OGC clearance); (b)(6), (b)(7)(C). OGC has corrected this mistake in the new review process, which includes a fact review of the status of each submitter to confirm the correct review standards are applied.

¹⁸⁷ DRAFT REPORT, at iv, 16-17, 19 & 82.

¹⁸⁸ *Id.* at 17. The OIG correctly notes that "By December 7, 2012, the assigned OGC deputy was unable to obtain detailed information on staffing in OCE," and that "Injurious flaws in administrative record-keeping for OCE economists were eventually revealed." *Id.* at 16-16, 4. However, flaws in administrative recordkeeping were immediately evident as the agency could provide very little data about who was properly appointed in OCE by December 7, 2012. After several months, OGC was able to provide additional information about most OCE economists by gathering data from human resources files (when available), security files (when available), and procurement files, and comparing that information to the directory of users in OCENet and information maintained by the Office of Data and Technology.

¹⁸⁹ *Id.* at iv, 16-17.

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explanation for the failures was complex, there was no appearance of fraud or bad faith on the part of OCE, the appointments by the Chief Economist were authorized; and the "nature of the administrative errors appeared to us to be somewhat trivial."¹⁸⁷

CFTC Management continues to maintain that it has the authority to share Section 8 data only with properly appointed employees, experts, consultants and contractors. Without proper appointment paperwork, there is no authority for employees, experts, consultants or contractors to access CFTC data protected under Section 8. Accordingly, when CFTC determined that there was a high risk that certain individuals were improperly accessing non-public data, the agency cut-off access to this data, temporarily suspended OCE publication of papers pending an agency review and then OIG investigation, and established a review process to include determining the status of individuals who wrote OCE papers. CFTC's decision to take steps to determine the scope of the problem, to prevent any further improper access to data protected under Section 8, and to ensure that OCE papers written by employees, experts or consultants with deficient appointments did not contain Section 8 and other nonpublic data was prudent and correct.¹⁸⁸

CFTC Management requests that the Draft Report address its contradictions in describing the administrative errors as "trivial"¹⁸⁶ in some sections of the Draft Report and as "more than a trivial problem in recordkeeping"¹⁸⁷ in other sections. We also request that the Draft Report reflect that CFTC Management takes any errors in administrative paperwork seriously and, as described in greater detail in Part I.Ci above, has taken steps to implement effective internal controls to prevent such errors from recurring.

A. Draft Report Determination that Appointment Paperwork Can be "Easily Fixed"

The Draft Report states that many of the deficiencies in the administrative onboarding paperwork for the OCE economists are "some what trivial" and concluded that they can be "easily fixed."¹⁸⁹ As examples, the OIG reported that (b)(6), (b)(7)(C) SF-52 was mostly but not fully completed¹⁹⁰ and that his SF-52, like those of "a number of" other OCE economists, did not have all of the requisite signatures.¹⁹¹ The Draft Report also noted that another OCE economist, (b)(6) initial, "had no records at all."¹⁹² Nevertheless, the Draft Report concludes that these errors can be "easily fixed."¹⁹³

¹⁸⁷ Id. at 17.

¹⁸⁸ It is important to note that if an OCE economist without the proper appointment paperwork wrote a paper that does not disclose Section 8 or other nonpublic information, the CFTC would not seek to block publication of the paper. However, as discussed above, the CFTC has an obligation to determine whether Section 8 or other non-public information was accessed and shared.

¹⁸⁹ DRAFT REPORT at 16-17.

¹⁹⁰ Id. at 17.

¹⁹¹ Id.

¹⁹² Id. at 16.

¹⁹³ Id. at 17.

¹⁹⁴ Id.

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Based on the facts known to CFTC Management and set forth in the Draft Report, CFTC Management disagrees with the Draft Report's conclusion that certain errors in appointment paperwork can be "easily fixed"⁴⁰² on a retroactive basis. There are limited circumstances under which agencies are permitted to retroactively correct personnel actions, including appointments. Specifically, the Comptroller General has ruled that:

"[P]ersonnel actions, including appointments, cannot be made retroactively effective unless clerical or administrative errors occurred that 1) prevented a personnel action from taking effect as originally intended, 2) deprived an employee of a right granted by statute or regulation, or 3) would result in failure to carry out a nondiscriminatory administrative regulation, or policy if not adjusted retroactively." *Matter of William A. Keel, Jr., and Richard Hernandez*, Small Business Administration – *de facto* employees, B-188424, March 22, 1977. (*Matter of Keel*) citing 54 Comp Gen. 888 (1975); See also *Matter of Jackie K. Smarts* – *De Facto Employee*, B-188574, Dec. 29, 1977 (*Matter of Smarts*).

The Comptroller General, however, has not found that the failure to complete appointment paperwork is an administrative or clerical error. For example, in *Matter of Keel*, two members of then President Carter's transition team, William A. Keel, Jr., and Richard Hernandez, were assigned to work at the Small Business Administration (SBA). *Matter of Keel* at 1. The White House did not instruct SBA on the personnel actions for these employees until a couple weeks after these employees started working at the agency; therefore, the appointments for Keel and Hernandez did not occur until a later date. *Id.* SBA asked the Comptroller General whether the agency could make the appointments for these individuals retroactive. The Comptroller General ruled that the factual situation regarding the two employees did not meet any of the criteria for retroactive personnel actions. *Id.* at 2.

Similarly, the Comptroller General ruled that there was no administrative or clerical error when an employee was not properly appointed in *Matter of Smarts*, B-188574. In this decision, an Army employee had worked forty hours prior to the Army's discovery that she "had not been properly processed in." *Id.* at 2. Relying on *Matter of Keel*, the Comptroller General ruled that the facts regarding *Smarts*' appointment did not satisfy any of the criteria set forth above regarding an administrative or clerical error. *Id.* at 3. See also *Richard M. Wain*, B-196620, March 13, 1984 (Department of Health, Education, and Welfare Office intern who worked without proper appointment and whose appointment paperwork was never completed by agency due to intern's failure to submit certain documentation cannot be considered a *de facto* employee and the intern could not be retroactively appointed because facts do not satisfy any of the criteria for an administrative or clerical error.)

Pursuant to Comptroller General decisions, incomplete paperwork or the complete lack of paperwork appears not to satisfy any of the criteria that permits agencies to correct administrative or clerical errors, especially where the errors appear significant and not isolated.

⁴⁰² *Id.*

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Applying the holdings of these Comptroller General decisions to the OCE economists, and based on the current information available to CFTC Management, we conclude that the Commission may not be authorized under law to retroactively correct certain deficiencies in the appointment paperwork. We disagree, therefore, with the Draft Report's conclusions that they can be "easily fixed."²⁰³

CFTC Management requests that the Draft Report be revised to reflect that the circumstances under which agencies are permitted to retroactively correct certain personnel actions, including appointments, is limited. Additionally, CFTC Management requests that the OIG state all paperwork that it has obtained and identified which the OIG believes contains administrative or clerical errors. Once CFTC Management receives the documentation, we will review it and will correct any administrative or clerical errors to the extent permitted by law.

B. Draft Report Application of Comptroller General Decisions Regarding De Facto Employees

In addition to asserting that identified errors in administrative paperwork can be "easily fixed,"²⁰⁴ the Draft Report also states that errors in the appointment paperwork or other appointment deficiencies of OCE economists could be easily remedied by categorizing the improperly appointed individuals as *de facto* employees.²⁰⁵ Specifically, the Draft Report states that "[b]ecause there was no indication of fraud or bad faith by the economists, or evidence that the appointments by the Chief Economist were unauthorized, the nature of the administrative errors appeared to us to be somewhat trivial, and easily fixed."²⁰⁶ According to the Draft Report, if the OCE economists are retroactively categorized as *de facto* employees, then any acts of these employees performed despite deficient paperwork, could be subsequently ratified.²⁰⁷ This is given as support for the conclusion in the Draft Report that "there appears to be no basis to invalidate or indefinitely delay work product by OCE economists who suffer administrative irregularities in their ongoing paperwork."²⁰⁸ As explained below, we do not find the cases recognizing *de facto* employees apposite on the facts as we currently understand them. In any event, the review process that has been established by CFTC is not designed to "invalidate or indefinitely delay work product by OCE economists."²⁰⁹ Rather, it is designed to ensure that papers cleared for publication do not contain Section 8 or other non-public data or protected information, and to determine the employment status of the author seeking publication, which

²⁰³ *Id.*
²⁰⁴ *Id.* at 17.

²⁰⁵ *Id.* at 18-19 (the OIG explains the Comptroller General opinions about *de facto* employees and found that such employees' work was not invalidated by paperwork errors); *Id.* at 32 (the OIG recommends being mindful that acts performed while a person is serving as a *de facto* employee are valid, and the agency should ratify their good faith acts).

²⁰⁶ *Id.* at 17.

²⁰⁷ *Id.* at 19, 32.

²⁰⁸ *Id.* at 19.

²⁰⁹ *Id.*

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could affect, among other things, the nature and content of the disclaimer used and the appropriate standard and scope of review to be applied to the paper.

GAO has long recognized that a *de facto* employee is one who performs the duties of a Federal office or position with apparent right and under color of an appointment and claim of title to such office or position. *Matter of Martin Mendelsohn Payment for Services Performed Before and After Appointment*, B-208041, May 1, 1953 (a consultant who received overpayments of salary during his 2-month appointment sought to have work performed before and after his appointment credited against his indebtedness; the consultant was not a *de facto* employee and thus was not entitled to payment since he did not act under color of authority and had no reasonable expectation of payment); *John F. Donnelly: De Facto Employee*, B-193605, January 8, 1979 (*Matter of Donnelly*) (consultant who claimed compensation for personal services rendered to the Army Corps of Engineers could be categorized as a *de facto* employee); *Matter of Cynthia S. Browning and Charlie L. Cranford - Expired Appointments - Status as De Facto Employees*, B-269534, November 29, 1995 (*Matter of Browning and Cranford*) (FIA employees who were not properly appointed were permitted to be paid as *de facto* employees for the time when they were not properly appointed); *Blackwell*, B-257669 (ambassador who was appointed by the President but travelled to his new post three weeks early was not entitled to compensation as a *de facto* employee because he could not provide evidence and proof that he was serving under color of authority); and *Matter of Acting Federal Insurance Administrator*, B-183012 (improperly appointed insurance administrator who served for 12 days under an improper appointment with the full knowledge and approval of the Secretary of Housing and Urban Development and the President was a *de facto* employee entitled to be paid for the reasonable value of his services, but appointment was not valid).

There are distinguishing facts between *Matter of Donnelly* and *Matter of Browning and Cranford* on the one hand and the situation involving OCE economists appointed as uncompensated consultants on the other. First, the individuals in these GAO cases had an expectation at the outset that they would be paid for their work. With regard to the OCE economists appointed or intended to be appointed as uncompensated consultants, CFTC never had any intention of paying them for their services and there was also no expectation on the OCE economist's behalf that they would be paid for their services.²⁰ Second, all of the cases cited above focus on how to justify some sort of payment to the individual serving under an imperfect appointment for the value of the services rendered; these cases would only be relevant to the present situation if the issue were how to pay the OCE economists serving as uncompensated consultants for the

²⁰ The Draft Report notes that the cases relied upon by the CNG focus upon whether individuals can be paid for their services notwithstanding improper appointments. *Id.* at 12 n. 78. However, the Draft Report does not provide analysis or cite authority which would extend the holdings of the cited cases to situations in which the individuals involved were never intended to receive payment.

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services they provided.²¹¹ The cases cited above do not provide CFTC the authority to retroactively cure appointment or paperwork deficiencies for consultants who were not intended to be compensated and who were not serving under a proper appointment.²¹² Additionally, the cited cases do not provide the CFTC with authority to convert individuals brought in under contract into *de facto* employees.

The Draft Report relies on *Matter of the Acting Federal Insurance Administrator's Status and Authority (Matter of Acting Federal Insurance Administrator)* B-183012, 1977 U.S. Comp. Gen. LEXIS 100 (June 29, 1977)²¹³ as additional support for the proposition that CFTC can retroactively cure improper appointments and ratify acts committed by individuals serving as *de facto* employees.²¹⁴ In this decision, an acting insurance administrator signed decision letters, issued reports and testified before Congress despite an improper appointment. 1977 U.S. Comp. Gen. LEXIS 100 at **9-10. The Comptroller General held that the Department of Housing and Urban Development could not automatically cure the improper appointment and noted that there were questions concerning the legality of the acts committed by the insurance administrator under the improper appointment. *Id.* at ** 10-11. CFTC Management disagrees with the OIG's reliance on this case, because OCE economists whose appointments as consultants were deficient do not qualify as *de facto* employees for the reasons discussed above.

Therefore, the proposition cited in the Draft Report that acts engaged in by an individual with *de facto* status have the same weight as if the individual was an officer *de jure*²¹⁵ is inapplicable to the OCE economists whose appointments were deficient. We further disagree with the Draft Report's reliance on *Matter of Acting Federal Insurance Administrator* as a basis of authority for the Commission to ratify the actions of and papers written by OCE economists whose appointments were deficient. The implications of the ratification of OCE research papers written by multiple authors and non-affiliated co-authors would be distinctly different from the ratification of an agency directive, policy or order. In the case of an agency directive, policy or order, these documents could be simply reissued with a new effective date by an individual who was properly authorized.²¹⁶

²¹¹ If, however, there are facts that establish that some of the unpaid consultants expected payment at the outset, that CFTC intended to pay these individuals, and the criteria of *de facto* employees are met, it could be determined that these consultants are *de facto* employees.

²¹² It is important to note that retroactive correction of appointment paperwork and the finding of an individual as a *de facto* employee are separate issues. Specifically, in *Matter of Swartz* the Comptroller General opined that when an individual is determined to be a *de facto* employee, it "should not be misunderstood as meaning he has been retroactively appointed in the position in which he worked. Rather, the rule is that even though an employee may not be retroactively appointed, he may yet receive compensation for his services if he is found to be a *de facto* employee." *Matter of Swartz*, B-182374 at 2.

²¹³ DRAFT REPORT at 18 n.75.

²¹⁴ *Id.* at 18-19.

²¹⁵ *Id.* at 18.

²¹⁶ *Matter of Acting Federal Insurance Administrator*, 1977 U.S. Comp. Gen. LEXIS 100 at ** 10-11.

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CFTC Management requests that the OIG provide its proposed guidance for ratifying previously authored economic research papers. In CFTC Management's view, any ratification of previously authored economic research papers, if appropriate, may have to be made by the Commission. This would insert an additional step to the paper review process described in Part I.H above as the Commission would have to determine whether ratification was appropriate for each specific paper prior to its release. We note that, if CFTC is unable to either retroactively correct administrative errors or apply the *de facto* line of cases to a particular individual, then the individual has no official status with the agency. However, as discussed in Part III.E, any papers produced by that individual would be reviewed for compliance with Section 8 and any signed NDA. Therefore, ratification would not necessarily be required in order for papers written by OCE economists whose appointments were deficient to be published.

Accordingly, CFTC Management disagrees with the Draft Report's conclusions regarding *de facto* employees.²¹⁷ CFTC Management requests that the Draft Report be changed to correctly reflect the current state of the law with regard to *de facto* employees. More specifically, the Draft Report should be changed to reflect that CFTC Management cannot cure all paperwork deficiencies by designating individuals with improper paperwork as retroactive *de facto* employees.

C. Authority of the Chief Economist

CFTC Management disagrees with the analysis in the Draft Report concerning the Chief Economist's authority to appoint contractors. Specifically, the Draft Report states that one individual (b)(6), (b)(7) a contract OCE economist, was appointed by the Chief Economist "under contract."²¹⁸ The Chief Economist, however, has no power or authority to bind the Commission to a contract. Under the FAR, the authority for a federal agency to enter into contractual relationships and commit the Government to the expenditure of funds is a delegated authority, which must be delegated in writing to a contracting officer. FAR 1.601. Contracting officers with delegated authority are the only individuals legally authorized to bind the Government by executing contracts and signing determinations and findings required by the FAR. FAR 1.604. Consequently, the Chief Economist has no authority on his own to bind the agency in a contract with an OCE economist.

Moreover, the Chief Economist also does not have authority to appoint an individual to federal employment on his own. CFTC's Office of Human Resources ("OHR") administers CFTC's personnel policies in accordance with Title 5 of the U.S. Code and OPM's statutes and regulations. At present, CFTC's OHR is the only authorized office in this agency that has

²¹⁷ DRAFT REPORT, at 18-19 (concluding that prior work completed by employee with inadequate security clearances, even if employee could not be retained after the security clearance is corrected, should not be distributed because employee was a *de facto* employee). *Id.* at 37 (the agency should ratify the good faith work of any persons serving as a *de facto* employee).

²¹⁸ *Id.* at 16.

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received OPM approval to administer the requirements of Title 5 of the U.S. Code. The Chief Economist has no authority to appoint anyone to the position of employee, expert, or consultant. The suggestion in the Draft Report that the Chief Economist has power to bind the agency by contract or to appoint individuals to positions as contractors or employees is in conflict with these authorities.²¹⁶

CFTC Management requests that the Draft Report be corrected to reflect that the Chief Economist has no authority to appoint employees under Title 5 of the U.S. Code. In addition, CFTC Management requests that the Draft Report be corrected to reflect that the Chief Economist does not have the authority to enter into government contracts with economists on behalf of the Commission.

D. Waiver of Compensation

As noted above, the Draft Report concludes that paperwork deficiencies can be "easily fixed."²²⁰ The discussion leading to this conclusion focuses on incomplete or unsigned hiring forms. A number of the OCE economists performed the work without compensation. The Comptroller General has defined "voluntary services" as those services rendered without a prior contract for compensation, or without an advance agreement that the services will be gratuitous. *Recess Appointment of Sam Fox*, 2007 U.S. Comp. Gen. LEXIS 97, at *9 and *Army's Authority to Accept Servs. from the Am. Assoc. of Retired Persons/Ret'd Teachers Assoc. (Army's Authority)*, 1982 U.S. Comp. Gen. LEXIS 667, at *3. An agency does not violate the Antideficiency Act if an agency accepts "gratuitous services"²²¹ or if an agency accepts services where it is authorized by law. 31 U.S.C. §§ 1341(a), 1342; *Principles of Federal Appropriations Law Volume II (Redbook)*, at 6-110 (Feb. 2006).

There are two ways an agency can accept gratuitous services. First, an agency can accept gratuitous services "pursuant to a valid, binding no-cost contract" prior to the time performance has begun.²²² *No-Cost Contracts for Event Planning Services*, 2007 U.S. Comp. Gen. LEXIS 220, at *9. Second, an agency can accept gratuitous services from an expert or consultant employed under the authority of 5 U.S.C. § 3109²²³ provided that "it is clearly understood and agreed that no compensation is expected." *Redbook*, at 6-99; *See also Comptroller General Warren to the Director, Bureau of Budget*, 1947 U.S. Comp. Gen. LEXIS 242 (*Bureau of Budget's* The Office of Legal Counsel ("OLC") and U.S. Government Accountability Office

²¹⁶ *Id.* at 17 (the OIG notes there was no evidence that the appointments made by the Chief Economist were unauthorized).

²¹⁷ *Id.*

²¹⁸ Authorities interpreting section 31 U.S.C. § 1342 have drawn a distinction between prohibited "voluntary services" and "gratuitous services." *See Redbook*, at 6-106.

²¹⁹ In general, to be enforceable, a contract with the United States Government requires an offer, acceptance of the offer, and consideration. *No-Cost Contracts for Event Planning Services*, B-308968, 2007 U.S. Comp. Gen. LEXIS 220 at *4 n.2 (citing *Rick's Mushroom Service, Inc. v. United States*, 76 Fed. Cl. 250, 259 (2007); *Total Medical Management, Inc. v. United States*, 104 F.3d 1314, 1319 (Fed. Cir. 1997)).

²²⁰ This authority permits agencies to procure expert and consultant services.

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("GAO") decisions have interpreted an agreement to serve without compensation as meaning that there should²²⁴ be written documentation of the agreement. However, recent GAO decisions and guidance, as well as other agency regulations and practices regarding consultants and experts, require that there be written documentation of the agreement.²²⁵ In *Matter of Department of the Treasury Acceptance of Voluntary Services*, B-324214 (Jan. 27, 2014), the Comptroller General found that:

"Treasury violated the voluntary services prohibition of the Antideficiency Act, 31 U.S.C. § 1342, when it accepted the unpaid services of four individuals. An agency may accept unpaid services when someone offering such services executes an advance written agreement that (1) states that the services are offered without expectation of payment, and (2) expressly waives any future pay claims against the government. Treasury obtained no such written agreements in this case. Treasury should report a violation of the Antideficiency Act as required by 31 U.S.C. § 1351."

CFTC Management is aware that the agency has an obligation to report any violations of the Antideficiency Act to the President, Congress, and GAO.²²⁶ At the time of referral, CFTC

²²⁴ The word "should" is a lower standard than words like "must" or "shall." Merriam-Webster's online dictionary includes the following definition of "should": "to express obligation, propriety, or expediency." *Should Definition*, MERRIAM-WEBSTER.COM, <http://www.merriam-webster.com/dictionary/should> (last visited Jan. 31, 2014). Garner's Dictionary of Legal Usage defines the word "should" as follows: "Usually, *should*, like *may*, is sometimes used to create mandatory standards, as in the ABA Code of Judicial Conduct. In that code, in which "the canons . . . establish mandatory standards unless otherwise indicated," six of the seven canons begin, "A Judge *should* . . ." BRYAN A. GARNER, GARNER'S DICTIONARY OF LEGAL USAGE (3d ed. 2011).

²²⁵ See in *Matter of Department of the Treasury Acceptance of Voluntary Services*, B-324214 (Jan. 27, 2014). This decision is consistent with earlier GAO decisions. Specifically, "[s]everal . . . [GAO] decisions note the requirement of a written record of the agreement to serve without compensation." *Redbook*, at 5-100. For example, in *Bureau of Budget*, the Comptroller General ruled that the Bureau could hire the experts or consultants without compensation because "there is no provision of law which purports to prevent the acceptance of gratuitous services, if otherwise lawful, where the services are requested by one who, upon being appointed as a Government employee without compensation, agrees in writing and in advance that he waives any and all claims against the Government on account of such service." (emphasis added). *Bureau of Budget* at *2-3. See also *Army's Authority* at *6, (Voluntary services are not prohibited "[p]rovided that each volunteer formally agrees in advance to serve gratuitously, and that the agreement be properly documented."); *Matter of Community Work Experience Program - State General Assistance Recipients at Federal Work Sites (Community Work Experience Program)*, 1987 U.S. Comp. Gen. LEXIS 4113, at *5 ("The GAO has frequently distinguished the acceptance of voluntary services from the acceptance of gratuitous services 'where it is clearly established by written agreement or by statute that no compensation is due or expected.'") (emphasis added).

Similarly, OLC has opined that gratuitous services agreements should be executed in writing. In *Employment Status of "Volunteers" with Federal Advisory Committees*, 1982 OLC LEXIS 47, OLC concluded that the Department could employ consultants as volunteers provided that "[t]he Commerce Department . . . is requiring each 'consultant volunteer' to execute a written waiver of compensation, which should be sufficient to protect the government from subsequent salary claims." *Id.* at *8. In *Authority to Employ the Services of White House Office Employees during an Appropriations Lapse*, 1984 OLC LEXIS 75, OLC concluded that "any employee who voluntarily waives his or her salary or compensation should do so in writing." *Id.* at *6.

²²⁶ 31 U.S.C. § 1351. Additionally, the Office of Management and Budget has published requirements for executive agencies for reporting violations of the Antideficiency Act. OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE

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Management could not locate documentation of agreements to waive compensation for those OCE economists who were not compensated by the Commission for their work.²²⁷ CFTC Management requests that the OIG provide any information collected during their review regarding waivers of compensation.

V. Additional Factual Issues

In addition to the issues and concerns set forth above, CFTC Management has identified the following issues that we believe appropriate for the OIG to review and address in the Draft Report.

A. Statements that Temporary Publication Suspension Was a Ban on Economic Research

On page 15, the Draft Report states that the Commission halted *all* economic research in December 2012. This assertion is not accurate. As the Draft Report states, OCE "conducts research on major policy issues facing the Commission; assesses the economic impact of regulatory changes on the futures markets and other sectors of the economy . . . provides expert economic support and advice to other CFTC offices; [and] conducts special studies and evaluations . . ." ²²⁸ While the December 2012 suspension temporarily halted publication of outside economic research papers, OCE continued to employ economists, who spent the past year conducting economic research to fulfill the mission of the OCE, the Commission, and the CEA.

By asserting that the Commission halted *all* economic research, the Draft Report overstates the Chairman's decision, which was limited to suspending external publication of individual research papers and to restricting access to non-public data to full-time CFTC employees. The statement also does not account for the important work performed by OCE during this past year. Therefore, we ask that this statement be corrected to indicate that only outside publication of individual research papers was suspended in December 2012 during the pendency of the review into the issues outlined in the Chairman's letter to the OIG. Additionally, the Draft Report does not explain that the Chairman's direction was limited to the pendency of the review and was never contemplated or implemented as a permanent publication suspension. As discussed in Part I.H above, soon after the OCE matter was referred to the OIG, the Office of the Chairman, OCE and OGC developed a procedure for reviewing and clearing research papers on a case-by-case basis, and three papers have been cleared through both the Paper Review Committee and OGC at this point.

PRESIDENT, OMB CIRCULAR NO. A-11, PREPARATION, SUBMISSION, AND EXECUTION OF THE BUDGET, at 4, §§ 145, 145.8 (2013).

²²⁷ E-mail from (b)(6);(b)(7)(C) Office of Human Resources to (b)(6);(b)(7)(C) (Mar. 1, 2013) (Re: Waivers of compensation).

²²⁸ DRAFT REPORT, at 8.

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CFTC Management requests that the Draft Report be revised to reflect that the publication suspension was not permanent and that OCE full-time employees and certain OCE economist consultants and contractors had access to Section 8 and other CFTC non-public data for economic research and other Commission-related purposes.

B. Statement that OCE Was Not Permitted to Hire New Economists

Page iii of the Draft Report states that "[f]or a year, OCE was not permitted to bring on any economists." CFTC Management was not provided context or support for this statement, and therefore, it is difficult to respond to this conclusion. We note, however, that the Chairman only specifically addressed the cessation of publication during the review to determine the status of OCE employees.²²⁸ To our knowledge, the review did not affect OCE's ability to request additional staff or contractors to meet their needs and fulfill the Commission's mission. We note that Fiscal Year 2013 was a difficult time financially for the agency, culminating in both a government shutdown and mandatory furlough days for all agency employees. We believe these extreme budget constraints which included the termination of a number of agency contracts in addition to limited hiring may have affected OCE's ability to hire additional staff—as they did all offices in the agency. While CFTC Management agrees with the OIG's statement that the Commission's posting of four economists positions in December 2013 is a positive development,²²⁹ we do not believe that there is any evidence that OCE was barred from hiring in 2013 on account of the concerns that prompted the Chairman's decision to seek an OIG investigation.

CFTC Management requests that the OIG provide the basis for the assertion that OCE was not permitted to bring on new economists. If the basis for OCE being unable to hire new economists is not tied to the current review of OCE, but rather is tied to the broader budget constraints affecting the entire agency, we request that the OIG remove these statements from the Draft Report.

C. Importance of Proper Onboarding

The Draft Report notes, with approval that it appears the OGC's proposed policy [to block publication of papers written by economists without proper paperwork] has not been officially adopted by the Chairman or the Commission.²³¹ It states that there is "potential unfairness" inherent in the proposed policy.²³² However, OGC has not proposed any final policy with respect to OCE, but rather has raised a series of concerns related to the onboarding issues.²³³

²²⁸ Gensler Letter to OIG on OCE.

²²⁹ DRAFT REPORT, at 28.

²³¹ *Id.* at 19.

²³² *Id.*

²³³ The concerns raised by OGC include, but are not limited to, the following: (1) if an individual is not properly onboarded, then access to Section 8 and other nonpublic information is improper, therefore the agency needs to be able to quickly verify the status of those who are onboarded at the agency and who have been granted access to data; (2) if an individual did not sign a waiver of compensation then, potential Antideficiency Act issues are discussed.

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The Draft Report may be equating the ongoing legal review of the onboarding issues with a formal OGC policy. The Draft Report also appears to suggest that there was some policy indicating that the OGC sought to focus on and penalize only OCE economists for not being properly hired.²³⁴ For example, the Draft Report notes that "no one in OCE or OGC was aware of the administrative errors in OCE economists' onboarding paperwork until December 2012. [N]obody documented or brought to the attention of management the fact that (b)(6)(b) initial request for network access was made by the Chief Economist and in process with ODI for more than two weeks before his contract was signed."²³⁵ The Draft Report further states that OGC is "at a loss to understand why accuracy was never emphasized before December 2012" and why the policy "is not being implemented Agency-wide."²³⁶ Further, the Draft Report appears to be suggesting that only OGC considers following proper hiring procedures to be important.²³⁷

It is true, to our knowledge, that no one in OGC was aware of the administrative errors with OCE economists' onboarding paperwork until December 2012 and that the problems with (b)(6)(b) documentation were not brought to the attention of CFTC Management. Because of OGC's function as legal advisor to the Commission, OGC only became aware of this issue when it was informed in December 2012. CFTC Management understands as well that neither OHR nor the Procurement Offices were aware of the breadth of these onboarding paperwork issues in OCE prior to December 2012. The Draft Report recognizes that "the discovery of dual hiring processes for new OCE economists were not documented or brought to the attention of management."²³⁸

As the Draft Report makes clear, the Chief Economist was "very aggressive"²³⁹ in pushing to get OCE economists hired by using multiple channels simultaneously. Indeed, the Draft Report further notes that the Chief Economist would "submit the same individual to be hired as both contractor and consultant at the same time, apparently intent on getting the person onboarded as quickly as possible."²⁴⁰ This was not brought to CFTC Management's attention until December 2012, at which point management in OGC, ODI, and OELI worked together to determine the scope of the problem and ultimately advised the Chairman to have the OIG, an independent investigator, review the issues.²⁴¹ The CFTC Management decision to recommend an OIG investigation demonstrates the Commission's strong commitment to accurately onboarding employees across the agency.

234 (b)(6) and (b)(7) if the agency does not properly onboard individuals then the agency cannot determine the standard of review and appropriate disclaimer will depend on the status of the individual OCE economist which must be documented through proper onboarding.

235 DRAFT REPORT, at 19.

236 *Id.*

237 *Id.*

238 *Id.* ("Given the importance OGC now gives to onboarding paperwork - at least for some OCE staff. . . .")

(Footnote omitted.).

239 *Id.*

240 *Id.*

241 *Id.* at 17.

242 Client Letter to OIG re OCE.

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Further, we do not believe that OCE is being subjected to unfair treatment.²⁴² To our knowledge, and we have not been provided with facts proving otherwise, the problems with onboarding were widespread in OCE, which the Draft Report acknowledges: "the errors were in a volume that indicated a more than trivial problem."²⁴³ The volume was more than trivial and the scope of error was unique to OCE because of the "very aggressive"²⁴⁴ manner in which the Chief Economist was operating. While the Draft Report characterizes this as an "annoyance,"²⁴⁵ the aggressive tactics used by the Chief Economist resulted in the serious problems described in this memorandum. OED and ODI have worked extensively with the new Chief Economist, and CFTC Management believes that these problems have been fully addressed and that new procedures are in place to ensure that the problems do not recur.²⁴⁶ On the other hand, we are not aware of any facts to suggest that other Commission Divisions and Offices operated in this manner to create onboarding issues, and we believe that proper onboarding has been, and continues to be, emphasized agency-wide.

CFTC Management requests that the OIG revise this section of the Draft Report to reflect that (1) OGC did not propose or adopt any new policy regarding publication of papers by economists who were not onboarded properly; (2) given OGC's specific role in the agency, it reasonably was not aware of the onboarding paperwork problems until such problems were brought to OGC's attention in December 2012, and which time it took immediate action; (3) the CFTC Management response to the problems was focused on OCE because CFTC Management had no reason, and discovered no basis, to believe that the onboarding problems extended beyond OCE; and (4) onboarding accuracy is viewed as important and is emphasized agency-wide. If there is evidence to suggest that onboarding paperwork accuracy is a problem with respect to other Divisions and Offices, CFTC Management requests that OIG provide it. Otherwise, we request the Draft Report be modified accordingly.

D. Draft Report Direction to Reinstate OCENet

We note the OIG's recommendation that OCENet should be restarted as soon as possible.²⁴⁷ CFTC Management takes seriously the OIG's concern that physical and information security concerns are "substantial" and the "absence of controls" is significant.²⁴⁸ We believe protecting data and information in the possession and control of the Commission from unauthorized disclosure consistent with Section 8, the Privacy Act, MOUs, and all other statutory requirements is of paramount importance.

²⁴² DRAFT REPORT, at 19.

²⁴³ *Id.* at 17.

²⁴⁴ *Id.*

²⁴⁵ *Id.*

²⁴⁶ Please see discussion of CFTC Management action in Part I.G. above.

²⁴⁷ DRAFT REPORT, at 33.

²⁴⁸ *Id.* at 31; see *supra* note 102.

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The Draft Report details the advantages of OCENet: "It stored data so that it did not need to be separately loaded onto the many desktops; it was faster, meaning that the manipulation and study of datasets could occur more quickly; and it contained unique programs for the manipulation of data."²⁴⁶ The OIG characterizes OCENet's ability to run the "complex programs necessary to analyze economic data" as a benefit.²⁴⁷ These analytical programs were in many cases coded using software or programming language compilers provided by the Commission and were in some cases open source software not available on the CFTC main network. However, there was not strict control over software installed in the environment, and it is possible that personally owned software was loaded onto OCENet by the OCE economists.²⁴⁸ This potential, along with other considerations including the Commission's IT policy,²⁴⁹ which prohibits individuals from installing personally owned software, warrants a review by CFTC Management of research program requirements, architecture, and controls before a determination is made whether OCENet should be restarted.

The Draft Report identifies another benefit of OCENet as the ability to hire or contract with outside economists to do research while limiting access to the CFTC main network.²⁵⁰ While this was the historical practice of the agency, if OCE economists are properly appointed to do the work of the Commission or are properly brought in under contract, then they are authorized to have access to the data on the CFTC main network depending on their need for access to the data. Based on this, it does not follow that a separate network is necessarily required. Staff in several Commission divisions, including DMO, DSGO, and OCE, currently have access to the data on the CFTC main network and perform complex surveillance and analytics using the main server. CFTC Management believes that a review of research program requirements, current analytics platform capabilities on the CFTC main network, and the cost of maintaining a separate OCENet should be conducted before a determination is made whether OCENet should be restarted.

There are a variety of information technology solutions that would allow the CFTC to achieve its economic research objectives. CFTC Management has not yet determined its preferred solution. While CFTC Management is sensitive to the idea that manipulating data can "occur more quickly"²⁵¹ on a network than on a desktop, we are unaware of a specific requirement to create a separate network, in lieu of using the existing CFTC main network. We also are unaware of any reasons why standard administrative controls used for all other Commission employees are insufficient for the economic research conducted in OCE. Nevertheless, CFTC Management has concluded that OCE, ODT, OED, OGC, and other offices will review the business need for a

²⁴⁶ *Id.* at 10.

²⁴⁷ *Id.*

²⁴⁸ Interview with Andrei Kirilenko, *supra* note 23.

²⁴⁹ COMMUNITY FUTURES TRADING COMMISSION, OFFICE OF THE EXEC. DIR., CFTC POLICY: IT RULES OF BEHAVIOR (2012).

²⁵⁰ DRAFT REPORT, at 10.

²⁵¹ *Id.*

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stand-alone network for OCE, and we would appreciate any other information OIG may be able to provide on this subject.

The Draft Report further notes the concerns about the physical and information technology security are "substantial" and are being addressed "at least in part in connection with an OIG audit" of the Commission's Fiscal Year 2013 Federal Information Security Management Act (FISMA) report.²⁵³ However, (b)(7)(E)

(b)(7)(E)

As described in Part I.G, ODT has begun to assess the controls needed in the event CFTC Management's review determines there is a need for a separate network to support OCE.

CFTC Management is sensitive to information security concerns and (b)(7)(E)

(b)(7)(E)

and is also in the process of acquiring a tool to support automated data loss prevention. However, we cannot at this time accept the recommendation to immediately restart OCENet without completing an internal review and assessment of the business need for a separate system and the potential security risks created by such a system. To make an informed decision, CFTC Management requests that the OIG provide the factual details the OIG relied upon to conclude that the absence of controls for OCENet was substantial. If we find that the security concerns cannot sufficiently be addressed to protect the data in accordance with all legal requirements, CFTC Management requests that the Draft Report be revised to omit the recommendation that OCENet be immediately restarted until the need is justified and all security concerns are addressed.

F. Draft Report Criticism of OGC for Lack of Commission Aggregation Standards

The Draft Report concludes that the lack of "narrow, objective, and definite standards" for reviewing OCE economists' papers is "disturbing."²⁵⁴ The OIG is correct that, although aggregation standards for information protected under Section 8 have been created for various market publications, there is not a similar formula for aggregation for research papers written by

²⁵³ *Id.* at 31.

²⁵⁴ BROWN & COMPANY CPAS, PLLC, DRAFT, COMMODITY FUTURES TRADING COMMISSION COMPLIANCE WITH PROVISIONS OF THE FEDERAL INFORMATION SECURITY MANAGEMENT ACT OF 2002, FISCAL YEAR 2013, at 30 (2013).

²⁵⁵ *Id.* at 31.

²⁵⁶ *Id.* at 32.

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OCE economists.²⁵⁹ While CFTC Management acknowledges that the lack of a single “one size fits all” standard to identify Section 8 data in the economic research papers is not ideal, we agree with the OIG’s assessment that reviewing the economists’ papers for information protected under Section 8 can be “complex, requiring an examination of context to determine whether aggregated trade data in an economic research paper may be reverse engineered”²⁶⁰ This complex factual and legal review is the reason why it may not be possible for the Commission to provide a standard aggregation policy for widely disparate topics, and for different techniques and methods for using the data, such as those covered in the economic research papers. Indeed, the complex, fact-intensive review is currently being undertaken by the Paper Review Committee established by OCE and draws on expertise throughout the agency to address the complexities involved in assessing aggregation and Section 8 data in papers.

The Draft Report appears to fault OGC for not providing written guidance on the standards to be applied with regard to the identification of information protected under Section 8 (including acceptable aggregations policies).²⁶¹ We do not believe this criticism of OGC is warranted because, as noted, the review is factually and legally complex and there is not a “one size fits all” approach. The Paper Review Committee has developed a process to review papers and engage with the authors to reach a factual conclusion that there is no Section 8 information disclosed by the papers. The Paper Review Committee then provides its recommendation to OGC as part of the new review process. OGC applies the legal standard for disclosure to the analysis provided by OCE. Additionally, as noted in Part I.E, OGC worked collaboratively with OCE and the Office of the Chairman to help identify information needed to review papers for Section 8 information. This collaboration is critical to ensure the Agency only discloses information properly, and we appreciate the OIG’s recognition of the complexity of this case-specific, fact-intensive undertaking.

While recognizing the complexity of reviewing the economic research papers, the Draft Report finds fault with the delay in approving publication of the paper.²⁶² CFTC Management does not believe this finding of fault is consistent with the facts as set forth in the Draft Report and in this memorandum. Because of the “more than trivial”²⁶³ errors in hiring, onboarding, and recordkeeping, as well as the “substantial”²⁶⁴ information security concerns, it is imperative to have a thorough and careful review process. As described in Part I.E above, CFTC Management has developed a review process that addresses those concerns.

CFTC Management requests that the OIG remove the Draft Report’s criticism of OGC for not providing written guidance on aggregation standards when the Draft Report acknowledges the

²⁵⁹ *Id.* at 15.

²⁶⁰ *Id.*

²⁶¹ *Id.* at 29 (the Paper Review Committee has not received written guidance from OGC on the standards to be applied with regard to Section 8).

²⁶² *Id.* at 19, 33–34.

²⁶³ *Id.* at 17.

²⁶⁴ *Id.* at 31.

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Inquiry is "complex, requiring an examination of context to determine whether aggregated trade data in an economic research paper may be reverse engineered . . ."²⁶⁵ CFTC Management requests that the OIG reflect in the Draft Report that determining whether data is sufficiently aggregated to avoid disclosures prohibited by Section 8 is a fact-intensive inquiry that requires case-by-case review of complex statistical and analytical techniques by individuals with data expertise, and the CEA provides the legal standard that guides such review.

F. CFTC Action With Regard to Papers on the Internet

On page III, the Draft Report states "[t]here is no indication that the Agency sought to remove any OCB research papers from the Internet." We do not agree with this finding because it is our understanding that, prior to the questions raised by the CME about potential Section 8 disclosures in (b)(6), (b)(7)(C) another paper published through the (b)(6), (b)(7)(C) website was brought to the attention of Commission staff. That paper initially appeared to contain Section 8 data. The agency conducted a review and determined that the data in the paper was simulated data,²⁶⁷ but the Chief Economist directed (b)(6), (b)(7)(C) to remove the paper from the website.²⁶⁸ Additionally, the significance of this fact is unclear to CFTC Management. By including this fact, the Draft Report seems to be suggesting that the Commission should have attempted to "unpublish" the materials previously published without CFTC Management knowledge. However, we do not agree that the agency staff should be "patrolling" the internet to determine if anyone has violated agency policy and procedures. In both the (b)(6) paper and (b)(6), (b)(7)(C) paper (b)(6), (b)(7)(C) when the Commission became aware that a paper had been published without undergoing proper review, the agency has conducted a review to ensure no Section 8 or other confidential or non-public information was released. CFTC Management requests that the OIG amend the Draft Report to reflect the efforts made by the agency as well as indicate whether the OIG believes the agency has any additional obligations as is currently implied.

G. Previous OGC Review of (b)(6), (b)(7)(C) Paper

Page 5 of the Draft Report states that OGC's December 2012 review revealed that (b)(6), (b)(6) paper (b)(6), (b)(7)(C) was reviewed by the Chief Economist, OGC attorney (b)(6), (b)(7)(C) and (b)(6), (b)(7)(C) in DMO. This conclusion is not attributed to any individual, and we believe it is not true. The OGC December 2012 review found that the paper

²⁶⁵ *Id.* at 15.

²⁶⁶ Email from (b)(6), (b)(6), (b)(7)(C) and Andrei Kirilenko (Oct. 22, 2012) (Re: (b)(6) website content appears to include non-public information. Please make sure removed. RE: Order Data question).

²⁶⁷ Email from Andrei Kirilenko to (b)(6), (b)(6) (Oct. 23, 2012) (Re: (b)(6), (b)(7)(C)).

²⁶⁸ Email from Andrei Kirilenko to (b)(6), (b)(6) and (b)(6), (b)(7)(C) (Oct. 23, 2012) (Re: (b)(6), (b)(7)(C) website content appears to include non-public information. Please make sure removed. RE: Order Data question); Email from Andrei Kirilenko to (b)(6), (b)(6) (Oct. 23, 2012) (Re: (b)(6), (b)(7)(C)).

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was reviewed by the Chief Economist and (b)(6), (b)(7)(C).²⁶⁹ The Draft Report is the first time that the OGC attorneys conducting the December 2012 review were informed that an economist in DMO also reviewed (b)(6), (b)(7)(C) paper.²⁷⁰ Therefore, this information was not discovered as part of the OGC review as asserted in the Draft Report.²⁷¹ Additionally, we note that (b)(6), (b)(7) had previously publicly presented his paper on at least three occasions prior to the review completed in November 1, 2012, by (b)(6), (b)(7).²⁷²

CFTC Management requests that the OIG change the Draft Report to reflect that the OGC December 2012 review revealed that the paper was publicly presented prior to (b)(6), (b)(7)(C) November 1, 2012, review. We further request that the Draft Report be changed to reflect that the OGC December 2012 review did not reveal that (b)(6), (b)(7) and reviewed (b)(6), (b)(7) paper, or any other paper.

II. Statements and Knowledge Attributed to CFTC Employee Not Interviewed by OIG

The section of the Draft Report entitled "Further OGC Review Reveals Information Security Concerns and Prompts Further OCE Restrictions"²⁷³ describes actions allegedly taken by an OGC attorney, discusses what that OGC attorney allegedly "learned," and suggests that the OGC attorney made allegations investigated by the OIG.²⁷⁴ The only OGC staff attorney involved in the review is (b)(6), (b)(7)(C) (b)(6), (b)(7) counsel, and we assume this is the attorney referred to in the Draft Report. (b)(6), (b)(7) has informed CFTC Management that she was not interviewed by the OIG regarding any of these issues.²⁷⁵

CFTC Management requests that the OIG interview the attorney regarding the information in the Draft Report or, in the alternative, provide the source for the information attributed to this attorney so we can fully respond to these allegations.

²⁶⁹ Interview with Andrei Kirilenko, supra note 13; Memorandum from (b)(6), (b)(7)(C) to Deputy General Counsel (Feb. 8, 2013) (Re: Section 6 Review of OGC Review of CFTC), (b)(6), (b)(7)(C).

²⁷⁰ Andrei Kirilenko (July 1, 2012) (Re: Paper draft for OGC clearance), (b)(6), (b)(7)(C).

²⁷¹ Memorandum from (b)(6), (b)(7)(C) to Deputy General Counsel (Feb. 1, 2013) (Re: Section 6 Review of OGC Review of CFTC), (b)(6), (b)(7)(C).

²⁷² Draft Report, at 5.

²⁷³ Draft Report, at 5.

²⁷⁴ Draft Report, at 5.

²⁷⁵ Draft Report, at 5.

²⁷⁶ Draft Report, at 5.

²⁷⁷ (b)(6), (b)(7)(C) informed CFTC Management that (b)(6), (b)(7)(C) an investigator with the OIG, stopped by her office one day during the investigation and asked for the legal basis for OGC's investigation that some of the OCE economists were not de facto employees. At no point during that conversation did (b)(6), (b)(7)(C) ask (b)(6), (b)(7)(C) any questions about OGC's review or which the OIG now attributes to her.

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I. Discussion of Contracts and Responsibilities of the Procurement Office

The Draft Report notes that "deficiencies . . . included unsigned contracts"²⁷⁶ and "for one OCE contractor, OED staff determined that the contract was not signed at all."²⁷⁷ CFTC Management respectfully requests that the OIG provide the documents and information relied upon to support these statements so that CFTC Management can review and fully respond to the statements in the Draft Report.

Additionally, the Draft Report notes that the Procurement Office is "responsible for administrative onboarding for contractors."²⁷⁸ As noted on CFTCNet, the Procurement Office is responsible for overseeing all CFTC procurement activities.²⁷⁹ Specifically, the Procurement Office is responsible for: (1) drafting and implementing procurement policy for the Commission; (2) serving as business manager with regard to agency contracting activities; (3) awarding and administering the Commission's contracts in accordance with sound business practices, federal laws and regulations, and agency policies; and (4) managing the Commission's commercial leasehold portfolio for headquarters and regional offices.²⁸⁰

According to the April 2011 "CFTC Guidelines: Staff Additions, Transfers, Moves or Changes," the requesting office, in this case OCE, is responsible for the administrative onboarding of contractors.²⁸¹ Per the April 2011 Guidelines, the Contracting Officer's Technical Representative ("COTR") is responsible for taking the lead for onboarding contractor staff. Specifically, the April 2011 Guidelines state:

"Contracting Officer Technical Representative (COTR) (for new contractors)

- Contacts Logistics and Operations (L/O) to coordinate workspace.
- Completes CFTC Form 718: New Contractor Profile for the selection of a new contractor, and submits it to staffchanges@cftc.gov. This starts the personnel security process.
- Completes CFTC Form 719: New Staff Requirements for a new employee of contractor and submits it to staffchanges@cftc.gov via email. This form provides basic information to allow OED staff to set up the new contractor."²⁸²

²⁷⁶ DRAFT REPORT, at 21.

²⁷⁷ *Id.* at 16.

²⁷⁸ *Id.* at 17.

²⁷⁹ See CFTCnet, *Operations, Financial Management, Procurement*, U.S. COMMODITY FUTURES TRADING COMMISSION, <http://www.cftc.gov/PressRoom/Newsroom/ContentPages/Procurement.aspx>.

²⁸⁰ *Id.*

²⁸¹ See COMMODITY FUTURES TRADING COMMISSION OFFICE OF INS. EXCISE DIR., HUMAN RES., CFTC GUIDELINES: STAFF ADDITIONS, TRANSFERS, MOVES OR CHANGES (2011).

²⁸² *Id.*

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(b)(6),(b)(7) former OCE Economist, and (b)(6), (b)(7)(C) former (b)(6),(b)(7)(C) economist, served as COTRs for OCE and were responsible for the administrative onboarding of OCE economists working under contract.

CFTC Management requests that the Draft Report be revised to reflect that the Procurement Office is not responsible for the administrative onboarding of contractors. Additionally, CFTC Management requests that the OIG interview (b)(6),(b)(7) and (b)(6),(b)(7) to obtain any historical information needed for the Draft Report about the administrative onboarding of contractors in OCE.

VI. Conclusion

As set forth above, CFTC Management has identified certain statements in the Draft Report that we believe should be revised. Additionally, CFTC Management disagrees with the Draft Report's legal analysis about the requirements of Section 18 of the CEA, the applicability of the First Amendment to research and writing conducted by OCE economists and the Commission's paper review process, the appointment authority of the Chief Economist, the appropriateness and legality of retroactive corrections to administrative paperwork, and the applicability of outside employment ethics regulations to OCE economists.

CFTC Management has exercised its best efforts to respond to the Draft Report in this memorandum. We appreciated the opportunity to review and respond to the Draft Report, and we welcome the opportunity to discuss the issues identified and our recommendations with the OIG further.

Anonymous Swap Dealer Number	Total Gross Notional Open Swaps as of March 7, 2014		Total Gross Notional Transacted October 18, 2013 to March 7, 2014	
	All values in US\$ millions			
1	\$	71,965,078.08	\$	10,348,198.73
2	\$	58,915,051.39	\$	8,449,620.80
3	\$	55,510,184.36	\$	5,451,299.25
4	\$	45,703,095.16	\$	1,077,814.04
5	\$	43,393,118.61	\$	4,003,758.40
6	\$	43,352,384.30	\$	4,794,507.96
7	\$	43,277,317.88	\$	2,876,225.94
8	\$	39,873,768.29	\$	1,252,786.75
9	\$	37,758,429.58	\$	6,942,306.84
10	\$	35,721,573.19	\$	2,625,568.70
11	\$	31,719,772.04	\$	1,573,072.51
12	\$	29,209,501.67	\$	2,816,983.60
13	\$	20,653,019.97	\$	1,183,607.33
14	\$	20,084,356.46	\$	1,054,383.31
15	\$	18,514,177.22	\$	557,947.39
16	\$	15,122,397.11	\$	841,442.49
17	\$	15,007,077.23	\$	1,015,971.88
18	\$	13,593,559.94	\$	905,113.35
19	\$	12,756,129.23	\$	601,674.28
20	\$	12,566,108.55	\$	554,400.31
21	\$	10,877,810.91	\$	472,787.47
22	\$	10,511,133.07	\$	821,505.57
23	\$	7,003,707.96	\$	183,854.03
24	\$	6,970,807.75	\$	78,438.36
25	\$	5,716,472.07	\$	383,809.57
26	\$	4,501,490.38	\$	470,735.56
27	\$	4,465,787.65	\$	1,209,641.17
28	\$	3,705,100.07	\$	147,773.39
29	\$	3,576,305.84	\$	499,811.78
30	\$	3,391,038.81	\$	272,102.29

31	\$	\$	3,231,049.57	\$	913,905.63
32	\$	\$	3,196,364.32	\$	241,974.04
33	\$	\$	3,129,916.52	\$	362,271.50
34	\$	\$	2,440,610.23	\$	1,317,792.51
35	\$	\$	2,001,684.26	\$	1,132,622.13
36	\$	\$	1,949,853.38	\$	262,201.28
37	\$	\$	1,929,206.35	\$	201,198.31
38	\$	\$	1,813,946.84	\$	58,548.54
39	\$	\$	1,531,299.58	\$	36,174.46
40	\$	\$	1,528,708.26	\$	199,232.02
41	\$	\$	1,471,879.36	\$	207,208.19
42	\$	\$	1,368,469.58	\$	69,630.59
43	\$	\$	1,133,257.57	\$	1,245.93
44	\$	\$	1,131,606.69	\$	32,901.27
45	\$	\$	1,081,866.47	\$	485,062.09
46	\$	\$	987,835.08	\$	63,806.27
47	\$	\$	966,288.68	\$	95,733.09
48	\$	\$	876,525.08	\$	39,139.24
49	\$	\$	809,541.71	\$	158,883.04
50	\$	\$	784,733.06	\$	-
51	\$	\$	778,896.38	\$	1,035.00
52	\$	\$	752,588.80	\$	94,563.83
53	\$	\$	746,064.91	\$	16,013.49
54	\$	\$	498,764.11	\$	9.79
55	\$	\$	376,176.76	\$	365,102.55
56	\$	\$	325,570.58	\$	67,858.31
57	\$	\$	299,419.56	\$	127,449.25
58	\$	\$	247,746.12	\$	8,939.54
59	\$	\$	207,578.82	\$	13.14
60	\$	\$	188,553.49	\$	493.03
61	\$	\$	140,238.69	\$	8,984.84
62	\$	\$	109,961.46	\$	889.78
63	\$	\$	94,392.03	N/A	
64	\$	\$	85,927.09	\$	15,913.43

65	\$	71,005.99	\$	17,318.45
66	\$	63,516.62	\$	4,376.00
67	\$	44,959.43	\$	2,384.41
68	\$	38,240.92	\$	377.39
69	\$	38,229.17	\$	3,096.21
70	\$	13,899.17	\$	-
71	\$	13,103.24	\$	-
72	\$	6,514.85	\$	-
73	\$	5,636.86	\$	-
74	\$	5,471.32	\$	1,700.24
75	\$	5,226.46	\$	700.00
76	\$	4,374.41	\$	-
77	\$	2,267.31	\$	-
78	\$	2,009.08	\$	-
79	\$	1,388.05	\$	-
80	\$	1,054.54	\$	492.46
81	\$	403.50	\$	-
82	\$	213.37	\$	-
83	\$	67.18	\$	-

Notes:

The Commission's staff prepared the attached spreadsheet, which presents, for each swap dealer with available and reliable transaction data over a sample data period, estimates of the Gross Notional Value of Outstanding Swap Positions as of March 7, 2014, and estimates of the Gross Notional Value of Swaps Transacted during the period October 14, 2013 to March 7, 2014.

The staff further notes the following with respect to the methodology used to calculate these estimates. First, the staff restricted the analysis to interest rate swaps and credit default swaps, by far the most liquid asset classes in the swap markets. The staff is expecting to report information on swaps activity for the remaining asset classes in the near future and, under direction of the Chairman, continues to work with market participants to improve the quality of data in these other asset classes, including the Equity, Commodity, and Foreign Exchange asset classes. Second, although there are 102 provisionally registered swap dealers, the attached spreadsheet includes estimates for only 83 swap dealers, which results from the fact that the analysis was restricted to the interest rate swap and credit default swap asset classes; in addition, transaction data cover the period October 14, 2013 to March 7, 2014. Provisionally registered swap dealers that are less active in these asset classes or transact mostly or more often in the Equity, Commodity, or FX asset classes may not be captured in the descriptive data, above. Finally, the staff notes that this analysis includes data from reports downloaded from three different Swap Data Repositories—CME Group SDR, DTCC Data Repository, and ICE Trade Vault.

DCO SPECIFIC PROPOSED AND FINAL REGULATIONS SINCE 2009

No.	Rule	Proposal or Final	FR Number	Publication Date	Effective/Compliance Dates
1	Financial Resources Requirements for Derivatives Clearing Organizations	Proposal	75 FR 63113	10/14/2010	N/A
2	General Regulations and Derivatives Clearing Organizations	Proposal	75 FR 77576	12/13/10	N/A
3	Information Management Requirements for Derivatives Clearing Organizations	Proposal	75 FR 78185	12/15/10	N/A
4	Requirements for Processing, Clearing, and Transfer of Customer Positions	Proposal	76 FR 13101	3/10/11	N/A
5	Risk Management Requirements for Derivatives Clearing Organizations	Proposal	76 FR 3698	1/20/11	N/A
5a	Risk Management Requirements for Derivatives Clearing Organizations	Proposal – Reopening of comment period.	76 FR 16587	3/24/11	N/A
5b	Risk Management Requirements for Derivatives Clearing Organizations; Correction	Proposal – Correction.	76 FR 16588	3/24/11	N/A

6	Clearing Member Risk Management	Proposal	76 FR 45724	8/1/11	N/A
7	Customer Clearing Documentation and Timing of Acceptance for Clearing	Proposal	76 FR 45730	8/1/11	N/A
7a	Customer Clearing Documentation and Timing of Acceptance for Clearing; Correction	Proposal – Correction	76 FR 47529	8/5/11	N/A
8	Derivatives Clearing Organizations and International Standards	Proposal	78 FR 50260	8/16/13	N/A
9	Derivatives Clearing Organization General Provisions and Core Principles	Final	76 FR 69334	11/8/11	<p>1/9/12: is the Effective date for the rules.</p> <p>5/7/12: Date by which DCOs were required to comply with §§ 39.11; 39.12; 39.13 (except for 39.13(g)(8)(i)); and 39.14.</p> <p>11/8/12: Date by which DCOs were required to comply with §§ 39.10(e); 39.13(g)(8)(i); 39.18; 39.19; and 39.20.</p> <p>1/9/12: Date by which DCOs were required to comply with all other provisions of the rules.</p>

10	Customer Clearing Documentation, Timing of Acceptance for Clearing, and Clearing Member Risk Management	Final	77 FR 21278	4/9/12	10/1/12: Effective date for DCOs. ¹
11	Enhanced Risk Management Standards for Systemically Important Derivatives Clearing Organizations	Final	78 FR 49663	8/15/13	10/15/13: Effective date for the rules. 12/31/13: Date by which systemically important DCOs were required to comply with §§ 39.29 and 39.30.
12	Derivatives Clearing Organizations and International Standards	Final	78 FR 72476	12/2/13	12/2/13: Effective date for the amendments to 190.09. 12/13/13: Effective date for 17 CFR 39.31 and 140.94. 12/31/13: Effective date for all other provisions of the rules.

¹ Please note that this rulemaking also included effective dates for other entities, such as futures commission merchants, swap dealers, and swap execution facilities.

WEDNESDAY, MARCH 26, 2014.

USDA RESEARCH, EDUCATION AND ECONOMICS

WITNESSES

DR. CATHERINE E. WOTEKI, UNDER SECRETARY, RESEARCH, EDUCATION AND ECONOMICS

DR. CHAVONDA JACOBS-YOUNG, ADMINISTRATOR, AGRICULTURAL RESEARCH SERVICE

DR. SONNY RAMASWAMY, DIRECTOR, NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

DR. MARY BOHMAN, ADMINISTRATOR, ECONOMIC RESEARCH SERVICE

DR. CYNTHIA CLARK, ADMINISTRATOR, NATIONAL AGRICULTURAL STATISTICS SERVICE

DR. DONALD K. BICE, ASSOCIATE DIRECTOR, OFFICE OF BUDGET AND PROGRAM ANALYSIS, DEPARTMENT OF AGRICULTURE

INTRODUCTION OF WITNESSES

Mr. ADERHOLT. Well, good morning. The subcommittee will come to order. Thank you for joining us this morning and to discuss the USDA's fiscal year 2015 budget request for its research agencies.

As I have mentioned before, the subcommittee is focused on the themes of ensuring the proper use of funds through oversight, ensuring the appropriate level of regulation to protect producers and the public, and ensuring funding is targeted to vital programs. We will be reviewing the budget requests with this in mind this morning.

I would like to welcome to the subcommittee Dr. Cathie Woteki, the Under Secretary for Research, Education, Economics, and chief scientist for the U.S. Department of Agriculture. Also joining today will be Dr. Cynthia Clark, Administrator of the National Agricultural Statistics Service; Dr. Mary Bohman, Administrator of the Economic Research Service; Dr. Chavonda Jacobs-Young, Administrator of the Agricultural Research Service; Dr. Sonny Ramaswamy, Director of the National Institute for Food and Agriculture; and Mr. Don Bice, Associate Director of Office of Budget and Program Analysis. Welcome, everybody.

OPENING STATEMENT—MR. ADERHOLT

USDA is proposing a \$63 million increase over the fiscal year 2014 enacted level for its research programs. It does not include the additional \$227 million for research that was included in the President's Opportunity, Growth, and Security Initiative. We cannot consider the initiative because it is outside the established budget cap for fiscal year 2015.

The budget request includes a significant increase of 50—sorry, of \$75 million to create three new innovation institutes. We will ex-

plore this proposal in detail as this was not part of the discussion of the 2014 farm bill.

There are also many other increases, decreases, consolidations and transfers in the budget proposal. The hearing today will allow the subcommittee to thoroughly examine them and ultimately help to determine whether USDA is effectively administering its programs, its activities, and meeting its broad mandate for agricultural research consistent with congressional intent.

Before I conclude, I do want to recognize Dr. Clark, who recently announced her retirement from the National Agricultural Statistics Service. Thank you for sharing your expertise and time with USDA over the years, and also with the agricultural community.

I also congratulate Dr. Jacobs-Young on her new appointment as Administrator of the Agricultural Research Service. We look forward to working with you. I enjoyed our visit yesterday when you came by the office, so thank you for doing that.

I also would like to thank Dr. Bohman for the timely assistance that your staff has recently provided this subcommittee on research questions. Your staff knew right where to go to find—to help us find the right answers, so thank you, Dr. Bohman, for that.

And finally, thank you, Dr. Ramaswamy, for your work to ensure that the National Institute of Food and Agriculture is sharing information with Congress, particularly in those as it relates to agriculture and food research initiatives which help us to make good funding decisions.

This subcommittee and all of agriculture is fortunate to have all of you that are sitting at the table this morning as experts, as professionals, as leaders in the ag community serving not only the Department of Agriculture, but also the Nation as a whole, so thank you for that.

At this point, I would like to recognize our ranking member for the subcommittee, Mr. Farr of California, and see if he has some opening remarks.

OPENING STATEMENT—MR. FARR

MR. FARR. Thank you very much, Mr. Chairman, and I echo your accolades for the fine work that the committee has done. It is nice to see the diversity here of women before our committee in a Department that has been predominantly, throughout its history, a very male-oriented Department.

I think this subject matter, I mean, it probably isn't controversial, so it doesn't attract a lot of people to come in, but it is—to me, our investment in research, America's investment in research, is probably the distinguishing factor of how America can stay ahead of the rest of the world in economic development.

I chaired the economic development committee in the California State Legislature and had a chance meeting with all of the top industrial leaders in the State, and every one of them indicated that the one thing that the government could do that they couldn't do alone is the investment in research; also investment in education, because of all their workforce came out of education. And, frankly, it wasn't about how much taxes and regulations there were; it was about how do you also create communities of quality of life that attract an intellectual capital that they need to hire in their compa-

nies, and sort of these things that were external were beyond the companies' ability to do on their own. And David Packard was very instrumental in my life and certainly built a beautiful aquarium in Monterey, but his interest was always—even with that aquarium—was in research and in marine research and applying that research.

So I find that this arm of the U.S. Department of Agriculture is key to America, and I am going to be asking some questions about why there isn't more investment, or why is there not an investment in one thing or another, or why there are cuts, because I think that if we are going to, in this competitive world—we are unique, Mr. Chairman, in that we have a lot of microclimates in this country that other countries don't have, particularly in the fresh vegetable area where you just can't grow these crops in other places of the world or even other places in the United States.

You know, there is a lot of pressure on food safety, food security, inputs, pesticides, herbicides, sort of the negative things that can affect the environment and have downstream effect. So, if we are going to really find alternatives to things that we don't want to continue to use, and if we are going to find better ways of producing food in a more cost-effective way, we are going to have to really strongly support our research service, so I appreciate the committee being here today and having this discussion. Thank you.

Mr. ADERHOLT. Thank you, Mr. Farr.

And, Dr. Woteki, again, welcome to the subcommittee. We will turn to you for your opening statements. Your full statements, of course, will be included in the record, so feel free to summarize any way that you would like, and then we will proceed on with the questions.

So Dr. Woteki.

OPENING STATEMENT—DR. WOTEKI

Dr. WOTEKI. Well, thank you, Chairman Aderholt, and good morning to you, and to Ranking Member Farr, and to Representative Pingree. It is a real pleasure for my colleagues and me to appear before you to talk about our budget request for fiscal year 2015. And as you have noticed and noted already, we are appearing before you with a new addition as the Administrator of the Agricultural Research Service. Dr. Chavonda Jacobs-Young testifies for the first time in this capacity. And I also greatly appreciate your noting the many contributions that Dr. Clark has made. So we are looking forward, though, to finding an outstanding replacement for Dr. Clark.

My colleagues and I have provided quite extensive written testimony for the record. We appreciate your putting that in, and I will summarize just at a very high level.

In addition to preparing for this hearing, we have been spending a lot of time in implementing the Agricultural Act of 2014, and our budget proposal includes additional reporting information for the National Institute of Food and Agriculture, for the Agricultural Research Service, and also for the Economic Research Service, which was required by section 7513.

A second report on research accomplishments, 5-year projections of our research priorities, and also examining potential areas of the

duplication with the private sector and other Federal agencies is in final clearance and will be submitted to you very promptly.

The President's fiscal year 2015 budget proposal and the farm bill provide for new ways of partnering with university scientists, with educators, and with the private sector. This investment in science and education is an important contributor to rural economic growth, to the creation of new industries, and also for keeping U.S. agricultural productivity high.

The return on the Federal investment in agricultural research is in the range of 20 to 1, and nearly 1 in 10 jobs in the U.S., about 16 million jobs total, is in the agriculture and food-related sectors.

The farm value of production is estimated to be \$400 billion, and the research investment, as Congressman Farr noted, pays off in a lot of different ways, in an educated workforce, in patents and licensing agreements that lead to new agricultural products and consumer goods, and in the creation of new businesses.

This past year the REE agencies accomplished a lot. ARS entered into more than 50 new Cooperative Research and Development Agreements (CRADAs) and continued working in another 250 active CRADAs, helping companies to solve problems through cooperative research. ARS annually files over 100 patent applications and averages over 400 active licensing agreements.

NASS completed the Census of Agriculture that is providing important information for informed policy decisions, and also program delivery.

The Economic Research Service informed public and private decisions with 268 new research publications and updates to over 70 different data products.

Work supported by the National Institute on Food and Agriculture at the University of Nebraska has resulted in the reduction in irrigation water used annually by 114 billion gallons. That is enough water to supply a city the size of Tucson, Arizona, for a year.

And to meet the opportunities to grow our scientific workforce, NIFA also supported the education and training of over 1,100 doctoral and post doctoral students.

So, the total request for the REE agencies is \$2.9 billion. The request includes \$75 million to establish three new innovation institutes focused on high priorities for research. The institutes are going to be virtual organizations, meaning no buildings will be built with these funds, but they will include multiple partners from academia, from the private sector, and from Federal labs. These will be public-private partnerships with the intention of leveraging private investment into them, and NIFA will be administering them as a competitive program.

The institutes are going to focus on three high-priority areas: pollination and pollinator health; combating the development of pathogens that are resistant to antibiotics; and the third one is going to focus on building a national network for bioproducts manufacturing innovation.

We are also committed in the budget to helping sister agencies in furthering food safety, and there is, within NIFA, a \$2.5 million request to establish a program to provide food safety training and outreach to owners and operators of small farms, food processors,

and fruit and vegetable vendors that are affected by the Food Safety Modernization Act of 2011.

The President's 2015 budget request, as you have indicated, also includes a separate Opportunity, Growth, and Security Initiative, and within that there is \$277 million targeted investments in this mission area. The initiative includes \$197 million for the Agricultural Research Service, and most of that would be dedicated to replacing the Southeast Poultry Disease Research Laboratory in Athens, Georgia, where very critical research on avian influenzas is conducted. And the initiative also includes \$80 million to enhance NIFA's base formula and competitive programs at Hatch and Evans-Allen and AFRI.

So, in conclusion, I believe that these initiatives that I have highlighted, as well as the high-priority budget increases and reallocations that are indicated in the agency testimony, are critical to sustaining and enhancing a well-rounded research and education portfolio.

Mr. Chairman, we look forward to working with you as we continue together to support a world-class level of science and to increase the strength of U.S. agriculture. My colleagues and I are ready to answer any questions you might have.

Mr. ADERHOLT. Okay. Thank you. Thank you, Dr. Woteki.

[The information follows:]

RESEARCH, EDUCATION, AND ECONOMICS**Statement of Dr. Catherine E. Woteki, USDA's Chief Scientist and Under Secretary
Before the Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies**

Chairman Aderholt, Ranking Member Farr, and members of the Subcommittee, my name is Catherine Woteki and I am the Chief Scientist and Under Secretary for Research, Education, and Economics (REE) at the United States Department of Agriculture (USDA). I am pleased to appear before you to discuss the President's Fiscal Year (FY) 2015 budgets for the REE mission area agencies. I am accompanied by the leaders of our four agencies: Dr. Chavonda Jacobs-Young, Administrator of the Agricultural Research Service (ARS); Dr. Sonny Ramaswamy, Director of the National Institute of Food and Agriculture (NIFA); Dr. Mary Bohman, Administrator of the Economic Research Service (ERS); and Dr. Cynthia Clark, Administrator of the National Agricultural Statistics Service (NASS). Also joining us is Donald Bice, the Associate Director of the Office of Budget and Program Analysis. Each agency has submitted written testimony for the record, which provides highlights of their proposed budget. I would especially like to take note of Dr. Jacobs-Young, who was appointed Administrator of ARS last month. Prior to joining ARS in 2012, she appeared before this committee as the Acting Director of NIFA and had previously served in the White House Office of Science and Technology Policy. I also note with regret that Dr. Clark has recently announced her retirement. Her service to NASS and USDA has been invaluable and I'm sure the committee joins me in wishing her the best in retirement.

Implementing the Agricultural Act of 2014

In addition to the preparation and presentation of the President's FY 2015 budget proposal, every agency in USDA has been hard at work implementing the Agricultural Act of 2014 (the Farm Bill). USDA has created a team, headed by Deputy Secretary Krysta Harden, to begin work on implementation of the law, and REE is part of that team. Our budget proposal includes additional reporting information for NIFA, ARS and ERS, which is required by section 7513 of the Act. Further, we have submitted to the Committee a report that details the research accomplishments of the Department in FY 2013 and includes a five year projection of REE's research priorities, also required by section 7513. We look forward to having discussions with you and your staff in the future about how this annual report can best serve your needs.

One of the largest tasks REE has in implementing the Farm Bill is the creation of an independent Foundation for Food and Agriculture Research. This new non-governmental entity will have the ability to leverage \$200 million in public funds to attract matching contributions from the private and non-profit sectors. This funding infusion will provide a much needed boost to the ability of the Nation's agricultural research apparatus, both public and private, to address the most critical questions and problems faced by producers. As stated explicitly in the law, this Foundation will supplement, not supplant or duplicate, ongoing research efforts within the Department or our University partners.

The Foundation provides USDA with an effective tool for fostering public-private partnerships, part of an administration-wide focus to identify private-sector partners to leverage Federal funds and increase technology development efforts. Empirical evidence suggests that

public food and agriculture research complements, rather than competes with, private research. Public investments in science and technology create new opportunities for private research to result in new products and processes for economic growth. Without continued robust public investments in science, it is likely that private investments will also taper off in the future as fewer technology opportunities emerge for private commercial development. This could undermine U.S. global competitiveness in agriculture, especially as other countries strengthen their research investments. The U.S. is no longer the world leader in public funding of agricultural science. Since 2009, China's spending on agricultural research has exceeded that of the United States. Brazil and India have also significantly increased their spending on agricultural research in recent years while the U.S. investment has lagged. Partly as a result, U.S. agricultural productivity is now growing more slowly than that of both China and Brazil. USDA research agencies continue to develop new strategies for partnering with private firms through their technology transfer policies. These policies are designed to facilitate technology transfer from public laboratories to private firms, decrease private costs of product development and commercialization, and stimulate more private investment in research and development.

Priorities in the FY 2015 Budget Proposal

In December of 2012, the President's Council of Advisors on Science and Technology (PCAST), recommended the creation of six large, multidisciplinary Innovation Institutes (Institutes) focused on emerging challenges to agriculture, supported by public-private partnerships with an investment of \$25 million for each Institute. In line with that recommendation, the budget will utilize \$75 million to initiate this program and create three institutes focused on discrete areas of research. The Institutes will be virtual organizations that include multiple partners from academia, the private sector, Federal labs, and others. These

public-private partnerships will take advantage of USDA's unique intramural laboratory assets, and provide financial leverage through funds administered by NIFA as a competitive program. The Institutes will bring together academia, research organizations, and businesses to conduct research that is complex and focused on the major challenges to agriculture in the 21st century.

The first focus area for these institutes will be on Pollination and Pollinator Health (PPH). Honey bee colony collapse disorder (CCD) and other pollinator declines have led to rising concern among scientific and agricultural communities regarding the health of these insect populations, the risks posed to pollinator services and the implications for agriculture. The causes of the decline remain uncertain, and are likely multi-faceted through a combination of poor nutrition and loss of natural forage, parasites, stress from transportation, and pesticide exposures. Bees pollinate more than 90 crops and are responsible for \$15 billion in added crop value. Half the nation's bees are needed to pollinate almonds alone, a \$3 billion crop with increasing acreage. The PPH Innovation Institute will utilize input from stakeholders to develop priorities for addressing biological, environmental and management issues associated with the wide-scale decline of honey bees and other pollinators nationwide.

The \$25 million increase for pollinator health for this Institute is part of the President's commitment to a government wide response to the large and ongoing declines in pollinator populations in the U.S. and world-wide. In total, USDA is proposing to commit \$71 million to this initiative in FY 2015, of which \$48 million will be in the REE Mission Area.

A second Institute will focus on the building of a National Network for Manufacturing Innovation (NNMI), consisting of regional hubs that will accelerate development and adoption of cutting-edge manufacturing technologies, by focusing on bio-based product development and manufacturing. The Institute will also focus on supporting commercialization of products

developed from basic and applied research through partnerships with private industry. Projects selected for funding will achieve short-term economic benefits, while simultaneously building a strong foundation for future basic research. USDA will consult with other Federal partners including DOE to ensure the NNMI is designed to complement existing efforts.

The Antimicrobial Resistance (AMR) Innovation Institute will address AMR through a systems approach from the farm to the consumer while engaging health-related practitioners. This approach will utilize public-private partnerships of multi-disciplinary teams of animal, agricultural, social and behavioral scientists. The one-dimensional intervention approach targeting the food consumed—specifically meat—is inadequate to achieve true mitigation of AMR. The environment, including soil, water, and wild and domesticated animals plays a significant role in the development and occurrence of AMR along the food chain. Through this Institute, NIFA will support the generation of evidence-based data to address known and emerging information gaps to mitigate AMR.

Further demonstrating USDA's commitment to a safe and secure food supply is our request for \$2.5 million to establish a program to provide food safety training, and outreach to owners and operators of small farms, food processors, and fruit and vegetable vendors affected by the Food Safety Modernization Act (FSMA) of 2011. The program will target small and medium-sized producers, as well as beginning and socially disadvantaged farmers, to focus on helping key target audiences understand and interpret new Federal food safety guidelines enacted under FSMA. This will enable producers to develop and implement those guidelines in their respective environments. This funding will facilitate a partnership with the Food and Drug Administration, who is charged with implementing FSMA, to jointly coordinate the program.

For NIFA, the President's Budget requests \$1.34 billion and continues its support for NIFA's core programs, including \$325 million for AFRI. AFRI is NIFA's flagship competitive grants program for research, education, and extension and it provides funding for projects that address critical issues in U.S. agriculture in a variety of program areas. AFRI will support efforts to help farmers, ranchers, forest owners, and rural communities adapt to climate variation, reduce greenhouse gas emissions, and increase carbon sequestration. Additionally, it will continue to address childhood obesity prevention for children and adolescents in the populations of greatest risk, including those eligible for USDA nutrition education and food assistance programs. Elsewhere in NIFA, the budget proposes \$2.5 million for a competitive FARM-Vets program that explores career opportunities and pathways, therapeutic interventions, resource conservation, and related studies for the veteran population in the food and agriculture sector.

In its budget, ARS proposes \$44 million for a new research on climate resilient land, crop, grazing, and livestock production systems. One of ARS' key program goals is to better understand the effects of climate change and its impacts on crops; range lands; pasture systems; and pests, weeds, and plant and animal diseases. Within this proposed initiative, ARS will utilize and strengthen USDA's Climate Regional Hubs, and develop adaptive technologies, practices, and strategies to mitigate the effects of climate change and minimize the detrimental effects on the Nation's soil, water, and air resources. Another ARS initiative directs \$26 million to focus on crop and livestock genetic improvements and translational breeding for enhanced food production. Translational breeding is the adaptation of information derived from genome technologies for crop and livestock improvement. Under this initiative, ARS will advance this science and increase agricultural productivity and resiliency by developing genetic resources and tools, and advanced molecular techniques.

ERS continues to develop a variety of tools useful to both consumers and producers. The Food Access Research Atlas (FARA) is a mapping tool that presents a spatial overview of food access indicators for low-income and other census tracts using different measures of supermarket accessibility. Since its release, the FARA tool has been ERS' most viewed data product.

Another successful ERS tool is the annual Agricultural Resource Management Survey (ARMS), which is USDA's primary source of information on the financial condition, production practices, and resource use of America's farm businesses and the economic well-being of America's farm households. Sponsored jointly by ERS and the NASS, ARMS is the only national survey that provides observations of field-level farm practices and the economics of farm businesses.

In February of this year NASS issued a preliminary release of 2012 Census of Agriculture data that contained high level estimates at the U.S. and State level. In May 2014 NASS intends to release the full Volume 1 series of data at the U.S., State and county level. Additionally, in FY 2015 NASS will restore several reports that were previously reduced or eliminated due to budget reductions in 2012. This includes the chemical use data series, allowing more frequent data on major row crops, and fruit and vegetable chemical use data on an alternating year basis. Also restored, is NASS' annual Fruit and Vegetable program. In 2015, NASS will augment this report by providing the in-season forecasts for fruits and nuts, including the monthly crop production reports and annual production reports for cherry and cranberry.

The President's FY 2015 Budget Request includes a separate Opportunity, Growth, and Security Initiative (OGSI) of \$56 billion that is designed to spur economic progress, promote opportunity, and strengthen national security through additional discretionary investments. REE is well represented in this package through a number of high priority programs totaling approximately \$277 million in targeted investments. The Initiative includes more than \$197

million for ARS, the bulk of which is dedicated to fully replace the Southeast Poultry Disease Research Laboratory in Athens, Georgia. In 2012, a review of ARS' capital infrastructure was completed and this laboratory was identified as the highest priority facility recommended for modernization. Construction of a new facility will enable USDA scientists to more adequately address emerging or exotic poultry diseases which threaten not only the Nation's poultry industry but also the health of Americans. The OGSF also includes funds directed at climate change resilience, earth sciences, translational breeding and additional funding targeted at finding alternatives to antibiotics used in agricultural production. Finally, the OGSF provides \$80 million to enhance NIFA's base capacity and competitive programs, including \$60 million for AFRI and \$20 million for competitively awarded grants for Hatch and Evans-Allen.

Mr. Chairman, as you can tell from my testimony and our 2015 budget initiatives, USDA-REE is focused on building on our foundation of a robust research infrastructure through a concerted effort to develop wide-reaching public-private partnerships. Adding the Foundation for Food and Agriculture and the Innovation Institutes to our intramural and competitive programs will engage the private sector and create a cohesive and comprehensive team of scientists engaged in the solving the world's toughest agricultural challenges. As we do this however, I feel it is important to address how these programs complement our ongoing work, rather than duplicate it.

The NIFA Agriculture and Food Research Initiative (AFRI) pursues research, education, and extension activities that provide science based solutions to address major agricultural challenges of national, regional and multi-state importance. Many of these solutions, which are in agricultural producers, consumers, and the public's best interest, would not justify major corporate investment or disparate private support may be too difficult to assemble efficiently.

However, the country is facing large emerging challenges which would justify major corporate investment and private support may be assembled more efficiently. The Innovation Institutes are designed to provide an overarching structure in the United States that supports sustained, interactive research between public and private scientists interested in specific agricultural challenges. The Foundation for Food and Agriculture Research will operate as an independent entity with its own governance structure. It will pursue fundraising from individuals, corporations, charitable foundations, and other sources. Funding and research will complement existing research conducted by the Agricultural Research Service, research funded by NIFA, and bridge gaps between public and private science.

I believe the initiatives I have highlighted, as well as the high-priority budget increases the REE agencies have requested in their proposals, are critical to sustaining and enhancing the well-rounded research portfolio of the Department of Agriculture.

Mr. Chairman, I look forward to working with you as we continue to support a world-class level of science at the Department of Agriculture to maintain and increase the strength of U.S. Agriculture. Thank you again for your time. My colleagues and I would be pleased to answer any questions you may have about the REE budget proposals.



Dr. Cathie Woteki is Under Secretary for USDA's Research, Education, and Economics (REE) mission area, and the Department's Chief Scientist.

Before joining USDA, Dr. Woteki served as Global Director of Scientific Affairs for Mars, Incorporated, where she managed the company's scientific policy and research on matters of health, nutrition, and food safety. From 2002-2005, she was Dean of Agriculture and Professor of Human Nutrition at Iowa State University. Dr. Woteki served as the first Under Secretary for Food Safety at the U.S. Department of Agriculture (USDA) from 1997-2001, where she oversaw U.S. Government food safety policy development and USDA's continuity of operations planning. Dr. Woteki also served as the Deputy Under Secretary for REE at USDA in 1996.

Prior to going to USDA, Dr. Woteki served in the White House Office of Science and Technology Policy as Deputy Associate Director for Science from 1994-1996. Dr. Woteki has also held positions in the National Center for Health Statistics of the U.S. Department of Health and Human Services (1983-1990), the Human Nutrition Information Service at USDA (1981-1983), and as Director of the Food and Nutrition Board of the Institute of Medicine at the National Academy of Sciences (1990-1993). In 1999, Dr. Woteki was elected to the Institute of Medicine of the National Academy of Sciences, where she has chaired the Food and Nutrition Board (2003-2005). She received her M.S. and Ph.D. in Human Nutrition from Virginia Polytechnic Institute and State University (1974). Dr. Woteki received her B.S. in Biology and Chemistry from Mary Washington College (1969).

AGRICULTURAL RESEARCH SERVICE**Statement of Dr. Chavonda Jacobs-Young, Administrator
Before the Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies**

Mr. Chairman and members of the Subcommittee, I appreciate this opportunity to present the Fiscal Year (FY) 2015 Budget request for the Agricultural Research Service (ARS). The President's FY 2015 Budget request for ARS is \$1,104,403,000, a net decrease of \$18,079,000 from the FY 2014 enacted budget.

Under its Salaries and Expenses account, ARS' FY 2015 Budget requests increases of \$73.9 million in new and expanded research program initiatives, \$7.1 million for pay costs, and \$4.7 million for decentralized General Services Administration (GSA) rental and Department of Homeland Security (DHS) security payments. The agency proposes offsetting these increases with \$103.8 million in research program reductions and reallocations. Specific information about the components of ARS' FY 2015 Budget are as follows:

Proposed Research Program Initiatives (\$73.9 million)**Climate Resilient Land, Crop, Grazing, and Livestock Production Systems -- \$44 million**

The current rate of agricultural productivity growth is lagging behind the world's expanding needs. By 2050, global agricultural demand is projected to grow by 70 to 100 percent due to population growth, energy demands, and higher incomes in developing countries. Meeting this demand for increased agricultural productivity will require development of production systems which are more resilient to the impacts of changing climates and improved stewardship of the Nation's natural resources. Unless land use

practices are made more sustainable, the productive potential of our land, water, and genetic resources will continue to decline.

Climate change will impact our agriculture and natural resources through higher temperatures, elevated carbon dioxide concentrations, changes in precipitation, and increases in weeds, pests, and diseases. Climate change will adversely impact all aspects of food security, from food production to availability. The challenge is to mitigate the effects of climate change and adapt to its unavoidable consequences.

In its FY 2015 Budget, ARS proposes \$44 million for a new research program initiative: Climate Resilient Land, Crop, Grazing, and Livestock Production Systems. One of ARS' key program goals is to better understand the effects of climate change and its impacts on crops; range lands; pasture systems; and pests, weeds, and plant and animal diseases.

Under the projected stresses of changing climate conditions, agricultural production must be enhanced on existing crop, pasture, and range lands. Research is needed to better integrate forage and food animal production systems, to provide improved production efficiencies and essential ecosystem services that ensure continued productivity and environmental sustainability.

Within the proposed initiative, ARS will utilize and strengthen USDA's Climate Regional Hubs, and develop adaptive technologies, practices, and strategies to mitigate the effects of climate change and minimize the detrimental effects on the Nation's soil, water, and air resources. New knowledge on the exposure and sensitivities of agroecosystems to climate change, management tools to compare production systems under various climate change scenarios, and technologies and strategies to enhance sustainability will be developed. Plant varieties and animal breeds will be introduced that are less vulnerable to the negative impacts of climate change and extreme weather events. Integrated animal and crop production systems will be developed that are better adapted to heat and water stress, diseases, and parasites.

In carrying out this research, ARS will partner and collaborate with numerous Federal agencies, universities, and private industry while continuing to develop the tools and infrastructure needed to handle the “big data” revolution and accelerate the pace of scientific discovery.

Advanced Crop and Livestock Genetic Improvements and Translational Breeding for Enhanced Food Production -- \$25.9 million

Meeting the world’s growing needs through greater agricultural productivity will require significant crop and livestock genetic improvements. The need to produce more food, more efficiently is unquestioned.

Genetics continues to play a major role in improving agricultural yields. For example, over the past 40 years, genetic improvements in dairy herds, through genetic selection, have contributed to increased milk yields. However, genetic improvements in beef herds and fish stocks have been much less dramatic. Scientific breakthroughs in new genetic technologies hold the key to agricultural productivity growth.

In its 2015 Budget, ARS proposes \$25.9 million for its other major new research program initiative: Advanced Crop and Livestock Genetic Improvements and Translational Breeding for Enhanced Food Production. Establishment of a “Translational Breeding Initiative” has been strongly recommended by the President’s Council of Advisors on Science and Technology on Agricultural Preparedness, agricultural stakeholders, and others. Under this initiative, ARS will advance “translational breeding,” that is, the adaptation of information derived from genome technologies for crop and livestock improvement. The agency’s translational breeding research will increase agricultural productivity and resiliency by developing genetic resources and tools, and advanced molecular techniques. Specifically, ARS, with its governmental, university, and private sector partners/collaborators, will:

- Ensure that U.S. agricultural resources contribute to greater global food security through enhanced breeding methods and sustainable intensification of production.
- Accelerate performance gains through development of new breeds, lines, and strains with better climate adaptation, drought tolerance, disease resistance, nutritional value, enhanced production efficiencies, and reduced environmental impacts.
- Expand genotype and phenotype analysis of national germplasm collections and genetic stocks under diverse environments, and extend access to crop and animal breeders.
- Develop high performance cyber information and bioinformatic tools that support the integration of “big data” for accelerated translational breeding, genetic resource analysis, and genetic traits analysis.

Pollinator Health and Colony Collapse Disorder -- \$4 million

Bee pollination is responsible for more than \$15 billion in added crop value each year. Commercial production of many crops, such as almonds and other tree nuts, berries, fruits, and vegetables are dependent on pollination by honey bees. However, the economic viability of the bee pollination industry is currently threatened by Colony Collapse Disorder (CCD).

CCD is the general term for the large scale deaths of honey bees in the United States and Europe. CCD was first reported in October 2006, when beekeepers began reporting significant unexpected losses. Annual losses from the winter of 2006 through 2011 averaged about 33 percent, with a third of those losses attributed to CCD. The causes of CCD remain uncertain, though likely involve a combination of poor nutrition and loss of natural forage, parasites, stress from transportation, and pesticide exposures.

As part of a Government-wide initiative to the serious problem of pollinator losses, ARS' FY 2015 Budget requests an additional \$4 million to continue its research on identifying “best management practices” (BMPs), and test the efficacy of various sets of BMPs to

determine practices that can prevent CCD and reduce colony mortality to acceptable levels. With the proposed funding, ARS will also continue its partnerships with the European Food Safety Agency and COLOSS (a 35-nation consortium to prevent colony losses) to evaluate the impact of the European moratorium on certain neonicotinoid pesticide uses. These activities will be undertaken in coordination with other USDA and Environmental Protection Agency partners, National Institute of Food and Agriculture's planned Innovation Institute, and private sector partners.

Proposed Pay Costs (\$7.1 million)

In its FY 2015 Budget, ARS is requesting \$7,120,000 for employee pay costs. This represents a one percent annual increase which is critical for recruiting and retaining top level scientists and staff, conducting viable research programs, and carrying out ARS' mission.

Decentralized GSA Rental and DHS Security Payments (\$4.7 million)

The President's FY 2015 Budget proposes the elimination of the central account that funds rental and security payments to the GSA and the DHS. Requests to fund these costs are now proposed within individual agency budgets. As such, \$4,670,000 is included in ARS' budget request for GSA rental and DHS security costs. This change will improve oversight and identification of future savings within the agency's rental portfolio.

Proposed Research Program Reductions and Reallocations (\$103.8 million)

ARS' FY 2015 Budget includes \$103,769,000 in research program reductions and reallocations. More than two-thirds of the proposed decrease will be reallocated from ongoing research programs and redirected to finance and offset the research initiatives, pay costs, and GSA rental/DHS security payments proposed in the FY 2015 Budget. In addition, to strengthen the agency's program priorities, ARS is proposing to consolidate

in FY 2015 the resources from six of its laboratories with other existing agency laboratories and locations.

OGS Initiative

The President's FY 2015 Budget request includes a separate Opportunity, Growth, and Security (OGS) Initiative that will be offset with spending reductions and tax reforms. If enacted, the OGS Initiative would provide additional ARS funding for: replacement/modernization of its Biocontainment Laboratory and Consolidated Poultry Research Facility in Athens, Georgia (\$155,000,000); Integrated Research for Land, Crop, Grazing, and Livestock Production Systems (\$11,000,000); Advanced Crop and Livestock Genetic Improvements and Translational Breeding for Enhanced Food Production (\$11,100,000); Expansion of Research Capacity in Earth Sciences (\$2,500,000); Food Safety Alternatives to Antibiotics (\$2,620,000); and other research priorities (\$15,000,000), for a total of \$197,220,000.

Closing

Millions of people in the world are alive today because of agricultural advances that have boosted yields. Yet despite these advances, more than one billion people remain undernourished. Food security for them remains a major challenge.

Much more research is needed if we are going to successfully address the enormous challenges of sustainably boosting food production in the face of changing climates and massive population growth in the developing world. Production growth is currently constrained by climate changes, and water, land, and resource availability. At the same time, agriculture needs to become more environmentally friendly to ensure its own sustainability.

In its FY 2015 Budget, ARS proposes two new crosscutting, multidisciplinary research initiatives: Climate Resilient Land, Crop, Grazing, and Livestock Production Systems;

and Advanced Crop and Livestock Genetic Improvements and Translational Breeding for Enhanced Food Production. These initiatives address the challenges of increasing agricultural food production to meet global needs while addressing demands for greater sustainability. In carrying out these initiatives, ARS will forge extensive, new partnerships and networks with other governmental agencies, universities, and private industry.

Mr. Chairman, this concludes my statement of ARS' Budget recommendations for FY 2015. I will be happy to answer any questions that the Subcommittee may have.



Chavonda Jacobs-Young
ARS Administrator

Dr. Chavonda Jacobs-Young recently served as ARS Associate Administrator for National Programs, where she led the Office of National Programs which manages the research objectives of the Agency. She also led the Office of International Research Programs which is responsible for ARS' liaison with its international partners.

Prior to moving into her role at ARS, Dr. Chavonda Jacobs-Young served as the Director of the Office of the Chief Scientist in the U.S. Department of Agriculture, where she was responsible for facilitating the coordination of scientific leadership across the Department to ensure that research supported by, and scientific advice provided to, the Department and external stakeholders were held to the highest standards of intellectual rigor and scientific integrity. She also served as the Acting Director for USDA's National Institute of Food and Agriculture.

Dr. Jacobs-Young was a senior policy analyst for agriculture in the White House Office of Science and Technology Policy where she supported the President's science adviser and others within the Executive Office of the President on a variety of agricultural scientific activities and worked across the Federal Government to improve interagency cooperation and collaboration on high-priority scientific issues.

Dr. Jacobs-Young is a native of Georgia. She holds M.S. and Ph.D. degrees in Wood and Paper Science and a B.S. degree in Pulp and Paper Science and Technology from North Carolina State University. She also is a graduate of American University's Executive Leadership in Public Policy Implementation Program.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE**Statement of Dr. Sonny Ramaswamy, Director
Before the Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies**

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to present the President's 2015 Budget for the National Institute of Food and Agriculture (NIFA), one of the four agencies in the Research, Education, and Economics (REE) mission area of the United States Department of Agriculture (USDA).

NIFA works in partnership with the land-grant university system, other colleges and universities, and public and private research and education organizations to support exemplary research, education, and extension that address many national issues from agricultural production, nutrition, and food safety to energy independence and the sustainability of our natural resources. These partnerships result in a breadth of expertise that can quickly and efficiently deliver critical knowledge through innovative systems.

NIFA Institutes

NIFA is organized into four institutes that administer Research, Education, and Extension programs in the areas of: Food Production and Sustainability; Bioenergy, Climate, and Environment; Food Safety and Nutrition; and Youth, Family, and Community. NIFA Institutes, including the Center for International Programs, continue to fund outcome-driven programs, which address science priorities that will ensure the global preeminence of United States agriculture. The Institutes provide leadership and administer Federal assistance programs that bring together experts in various disciplines and functions to form multidisciplinary, outcome-based teams on projects that have a global presence in a wide array of agricultural and related disciplines. The programs also are reflective of Farm Bill priorities, and the investment in

research and development is providing transformative solutions to the Nation's challenges, creating jobs, and promoting local economies.

Proposal

The NIFA 2015 budget proposal for discretionary funding is \$1.34 billion. In particular, NIFA's budget includes increases for the Agriculture and Food Research Initiative and several new programs including: (1) public-private partnerships for innovation institutes; (2) veterans in the agricultural sector; and (3) food safety outreach activities. The NIFA 2015 budget request maintains capacity funding and requests an increase for the Hispanic-Serving Agricultural Colleges and Universities Endowment Fund.

The 2015 budget request aligns funding and performance objectives with USDA strategic goals and the REE Action Plan. NIFA defines distinct performance criteria, including strategic objectives and key outcomes, with identified annual targets. As part of an integrated budget and performance process, NIFA conducts periodic portfolio reviews by external experts.

Agriculture and Food Research Initiative (AFRI)

The President's 2015 budget proposes \$325 million for AFRI. AFRI is NIFA's flagship competitive grants program for research, education, and extension. The program provides funding for projects that address critical issues in U.S. agriculture in the following program areas: (1) food security; (2) water for agriculture; (3) climate variability and change; (4) sustainable bioenergy production; (5) food safety; (6) childhood obesity prevention; (7) foundational science; and (8) food, agriculture, natural resource, and human sciences education and literacy initiative.

Food Security: In 2015, programs will address pressing issues in food production that contribute to national and global food security while helping America promote sustainable agricultural production and biotechnology exports. Funding will support efforts to develop more sustainable, productive, and economically viable plant and animal productions systems. This investment will

strengthen food security, enhance production capacity and capabilities at all levels, and encourage diversification of agricultural systems.

An AFRI Coordinated Agricultural Project (CAP) with the University of Maryland is empowering honey beekeepers to work closely with apiculturists to implement management tactics that help reverse losses of honeybees. By bridging the gap between research and practice, beekeepers report that the bee CAP has contributed to a seismic shift in the ability to maintain healthy colonies. As a result, the project is contributing to the sustainable production of crops that depend on honey bees for pollination, while helping to ensure access to an affordable and abundant food supply.

Water for Agriculture: The development of new science and technologies focusing on widening the array of choices for conserving water and sustaining water quality at multiple scales is needed. This new science priority would evaluate how knowledge and technology, incentives, and policies help to promote appropriate decision-making. It will focus on solutions for water management in light of the extreme weather events and droughts, and it will link food, water, climate change, energy, and environmental issues. Funding will allow development of management practices, technologies, and tools for farmers, ranchers, forest owners and managers, public decision-makers, public and private managers, and citizens to improve water resource quantity and quality.

Climate Variability and Change: AFRI will support efforts to help farmers, ranchers, forest owners, and rural communities adapt to climate variation, reduce greenhouse gas emissions, and increase carbon sequestration. Specifically, the program will fund research on the effects of climate on microbes, pathogens, arthropods, weeds, and other pests which provide process-level knowledge of the impact of climate on the environmental-microbial matrices and host-pest interactions in food, plants, animals, and aquatic and soil ecosystems. In addition, program results may be used by the Climate Hubs to educate farmers, ranchers, and forest landowners on practices to ameliorate and/or adapt to climate change variability.

A study at the University of Florida is working on adapting kernel metabolism to enhance maize yield under adverse climatic conditions. This will be done by using modified genes to mitigate the yield loss that occurs during growth at elevated temperatures. The expected outcome is to enhance the heat stability of maize endosperm thereby increasing yield. In another project, Oklahoma State University is developing selection tools for livestock producers that focus on traits influencing adaptation to climate change. The project includes reducing water intake or increasing efficiency of water utilization, increasing pest resistance, and enhancing heat stress tolerance. The goal is to develop and deliver tools for producers to select for animals that are adaptable to drought and climate change.

Sustainable Bioenergy Production: AFRI sustainable bioenergy funding will focus on the societal challenge to secure America's energy future with high relevance to the development of sustainable regional feedstock systems for the production of bioenergy and bio-based products. The program strives to reduce U.S. dependence on fossil fuels, meet the production goals for biofuels within the Energy Independence and Security Act, and ultimately help develop the bio-based economic enterprises in rural communities. This will be accomplished through the production of sustainable bioenergy in regional systems that materially deliver liquid transportation biofuels.

AFRI is continuing its support of the Loblolly Pine Genome Project. With the goal of sequencing the genome of Loblolly Pine and other conifer genomes (Sugar Pine and Douglas-fir), the University of California developed a whole genome shotgun (WGS) strategy used to create the loblolly pine genome assembly. This successful WGS strategy is now underway for the Sugar Pine and Douglas-fir for supporting the growth of a biobased economy that generates biofuels and other non-traditional biobased products (e.g., pharmaceuticals, industrial chemicals, and lubricants) through agricultural production.

Food Safety: NIFA is committed to advancing the safety of the U.S. food supply through efforts to minimize antibiotic resistance transmission through the food chain and reduce microbial food safety hazards of fresh and fresh-cut fruits and vegetables. NIFA will fund work to advance

investigator-driven integrated research to solve complex food safety challenges in plant and animal food systems; amplify applied research to advance education and outreach activities to food safety audiences; expand and improve: mitigation strategies for reducing antimicrobial resistance, safety of fresh and fresh-cut fruits and vegetables, and processing technologies for enhancing food safety; and integrate nutrition and food safety efforts to create a healthier food supply.

Virginia Polytechnic Institute and State University is developing a hands-on food safety educational program delivered through Virginia and North Carolina County Extension Agents to farmers' market managers and vendors. The program is designed to reduce risk and enhance positive food safety culture throughout farmers markets. Project outcomes include increasing the number of participants educated and trained in safe food handling and preparation and implementing risk reducing practices that enhance the safety of farmers' markets and the local food system.

Childhood Obesity Prevention: According to the National Health and Nutrition Examination Survey administered by the U.S. Center for Disease Control and Prevention, prevalence rates of overweight children and levels of obesity in adolescents have tripled over the past 30 years. To help improve nutrition and reduce obesity, the University of Southern California developed a smartphone application to help low income families and children access information about healthy foods. The program goal is to offer families a tool that is easy to understand and use and one that will provide specific nutrient information that matches available food options.

In 2015, AFRI will continue to address childhood obesity prevention for children and adolescents ages 2-19 in the population of greatest risk, including populations eligible for USDA nutrition education and food assistance programs, the Supplemental Nutrition Assistance Program, and child nutrition programs.

Foundational Science: NIFA has committed 40 percent of AFRI funding to foundational science. Funding will allow substantive research investments in AFRI's Farm Bill priority areas.

Included under this program area is the Critical Agricultural Research and Extension (CARE) competition, which funds projects that address critical needs related to plant and animal production and protection, and the new Exploratory Research Grants Program, which supports innovative, “blue-sky” ideas that lead to quantum leaps in the areas of food security, climate change, environmental quality and natural resources, nutrition, obesity, food safety, strong families and vibrant communities, and thriving youth.

Food, Agricultural, Natural Resource, and Human Sciences Education and Literacy

Initiative: NIFA continues its investment to ensure development of a diverse workforce that contributes to the national food and agricultural system by supporting education and training programs for the workforce and scientists in the food, agriculture, natural resource, and human sciences. AFRI will support activities for pre-doctoral and post-doctoral education and research training through awards made to individuals pursuing careers in NIFA research priority areas. The research and extension experiential learning initiative for undergraduates will provide opportunities for underrepresented students, including those from minority serving institutions, community colleges, and other universities to obtain hands-on experience and training at land-grant and non-land-grant universities and USDA laboratories, thus preparing the graduates to join the agricultural workforce or pursue graduate studies in agricultural and related sciences.

Public-Private Partnerships for Innovation Institutes

In December 2012, the President’s Council of Advisors on Science and Technology (PCAST) proposed that a new innovation ecosystem for agriculture is needed to leverage the best from different parts of the broad U.S. science and technology enterprise and recommended creation of six large, multidisciplinary innovation institutes focused on emerging challenges to agriculture. In line with this recommendation, in 2015 NIFA proposes funding to establish three new Institutes, with an investment of \$25 million for each Institute. Funds will support a competitive selection process that leverages public-private partnerships. The three Innovation Institutes will include: 1) Pollination and Pollinator Health for research on pollinator health to combat pollinator decline and Colony Collapse Disorder (as part of USDA’s commitment of over \$70 million to this important government-wide initiative); 2) National Network for

Manufacturing Innovation to focus on biomanufacturing and bioproduct development; and 3) Antimicrobial Resistance to promote a systems approach from the farm and farm environment to the consumer in order to address antimicrobial resistance.

Food and Agriculture Resiliency Program for Military Veterans (FARM-Vets)

Understanding why and how best to engage veterans in the agricultural sector is congruent with the critical need to identify the next generation of farmers, producers, and entrepreneurs as an aging farm population and workforce transitions to retirement, especially in rural areas where labor shortages are acute. The proposed FARM-Vets program promotes competition that explores career opportunities and pathways, therapeutic interventions, resource conservation, and related studies for the veteran population in the food and agriculture sector. Funds totaling \$2.5 million will be used for projects to inform the establishment and scalability of programming that helps veterans develop farming and ranching skills, business plans, and agriculture systems management.

Food Safety Outreach Program

NIFA, in close collaboration with the Food and Drug Administration, will establish a food safety outreach program to provide food safety training, education, extension, outreach, and technical assistance to owners and operators of small farms, small food processors, and small fruit and vegetable vendors affected by the Food Safety Modernization Act (FSMA) of 2011. The program will facilitate the integration of food safety standards and guidance in a variety of agricultural production systems encompassing conventional, sustainable, organic, conservation, and environmental practices. The budget requests \$2.5 million for the program.

Capacity Programs

NIFA recognizes the importance and the significant impact capacity funding has on our State partners and on the research, education, and extension activities they perform in support of our Nation's globally preeminent food and agricultural enterprise. Therefore, during these challenging times for limited financial resources, we request that funds for capacity programs be maintained at the 2014 funding level. NIFA requests a total of \$746 million for Hatch Act, McIntire-Stennis Cooperative Forestry, Evans-Allen Program, Smith-Lever Formula 3(b) and (c),

Extension Services at 1890 Institutions, Smith-Lever 3(d) Expanded Food and Nutrition Education Program, and Renewable Resources Extension Act. This level of funding will help maintain current research and extension efforts in production agriculture by our state and university partners.

Hispanic-Serving Agricultural Colleges and Universities Endowment Fund

The Hispanic/Latino community is the fastest growing sector of the American population. For 2015, the NIFA budget requests \$10 million to establish an endowment fund for the Hispanic-Serving Agricultural Colleges and Universities (HSACU). This investment is needed to assist HSACUs compete effectively for NIFA competitive grants. Funds from this endowment will help in the development of a skilled and marketable Hispanic student population from the HSACUs for employment in the food and agriculture sector, which in recent years has seen unprecedented growth and is unable to meet the demand for a qualified workforce. Additionally, as Hispanics have historically been underrepresented in such professions as science, technology, engineering, and mathematics, the Nation could face serious shortages in many critical professions, including the agricultural sciences. Increasing investment in HSACUs will help close this educational gap while addressing our Nation's need for a qualified workforce.

Consolidation of Science, Technology, Engineering and Mathematics (STEM) Programs

The Budget includes a proposal to consolidate Science, Technology, Engineering and Mathematics (STEM) programs as part of a government-wide initiative. Affected NIFA programs include the Research and Education Activities – Institution Challenge Grants, Multicultural Scholars Grants, and Graduate Fellowship Grants; and Secondary/2-year Post Secondary Education Program. Also consolidated is funding for Extension Activities – Women and Minorities in STEM Fields and Agriculture in the Classroom.

Other Programs

The 2015 Budget continues many programs at the 2014 funding level. We will continue support for Sustainable Agriculture Research and Education Program; Minor Crop Pest Management, IR-4; Crop Protection/Pest Management; and Food and Agriculture Defense

Initiative. Funding also is maintained for 1890 and 1994 land-grant universities and Hispanic-Serving Institutions. NIFA will continue funding for most of the other research, education, and extension programs.

Management Initiatives

The proposal includes \$9.8 million (an increase of \$2 million) in Federal administration costs to support continued modernization of our grant application systems and processes. Such improvements are desperately needed and will improve transparency and reporting with a system that is completely paperless and links the functionality of all business processes associated with NIFA's mission as a Federal funding agency for research, education, and extension. In addition, as part of a USDA proposal to decentralize funding, funds are requested within the agency budget to support rental payments to the General Services Administration for facility space and to the Department of Homeland Security for security costs.

Opportunity, Growth, and Security Initiative

Recognizing the importance of the two-year budget agreement Congress reached in December, the President's Budget adheres to the Bipartisan Budget Act of 2013 discretionary funding levels for 2015. Within a separate Opportunity, Growth, and Security Initiative (OGSI), additional funds above the Budget level are allocated to support AFRI, Hatch Act, and Evans-Allen. Under the OGSI, AFRI will focus on climate resilient agricultural production systems: climate change adaptation and mitigation, water resources and drought mitigation, and food security and sustainability. A new competitive portion of the Hatch Act capacity grant and the Evans-Allen capacity grant will fund competitive research that are multi-state collaborations to support national and regional challenges pertaining to food security, water and climate change, nutrition, and obesity. The OGSI provides \$80 million to enhance NIFA's capacity and competitive programs, including \$60 million for AFRI and \$20 million for competitively awarded grants for Hatch and Evans-Allen.

Conclusion

NIFA acknowledges and appreciates Congress passing and the President signing the Agricultural Act of 2014 (2014 Farm Bill). Along with other USDA agencies, NIFA is diligently working to implement the 2014 Farm Bill. NIFA will continue to organize and manage programs to maximize our research, education, and extension investments in America's agricultural future. With this 2015 budget proposal, NIFA will persevere in leading the food and agricultural sciences to create a better future for the Nation and the world.

Mr. Chairman, this concludes my statement. I will be glad to answer any questions the Subcommittee may have.



Sonny Ramaswamy served as professor of insect physiology at Mississippi State University for 15 years. He served as head of the Department of Entomology at Kansas State University from 1997 to 2005 and as University Distinguished Professor. In 2002, Sonny was named KSU Presidential Outstanding Department Head. During his time as head, the department saw unprecedented growth in extramural research support and graduate student enrollments. Sonny's proudest legacy at KSU is creating a top ranking department, hiring outstanding faculty, and envisioning and creating the KSU Insect Zoo, which is thriving today and receives thousands of visitors each year. He was active in the community and university theater, Habitat for Humanity, and enjoyed riding his Harley-Davidson motorcycle, including a motorcycling trip in the Himalayas with his son-in-law, Andrew Park.

Sonny directed Purdue's agricultural research programs from 2006 to 2009, and facilitated multi- and trans-disciplinary research and education projects on bioenergy, climate change, water, agroecology, and food security and production agriculture—his proudest achievement was to help faculty, staff, and students work across disciplines to address societal challenges, and the concomitant success on several multi-million dollar grants.

In 2009, Sonny moved to Oregon State University to serve as the dean of the College of Agricultural Sciences and director of the Oregon Agricultural Experiment Station. At OSU, Sonny facilitated unprecedented success in extramural research support and donations to the College, and was able to work with stakeholders to mitigate the severity of state budget cuts. Sonny also facilitated the development of the College's strategic direction and restructuring. Capitalizing on the College's strength in enology and viticulture, brewing, and cheese making, he crafted a vision to create a Center for Innovations in Fermentation aka *iFerm*, with its first product being the Beaver Classic Comte-style artisan cheese.

On May 7, 2012, President Barack Obama appointed Sonny to serve as director of the United States Department of Agriculture's National Institute of Food and Agriculture (NIFA). As part of USDA's Research, Education, and Extension mission, Sonny oversees a NIFA portfolio of well over \$1 billion in funding for a wide range of extramural research, education, and extension projects that address issues related to food security, nutrition and childhood obesity, food safety, climate change, water, bioenergy, human sciences, and youth, family, and communities.

As a faculty member, Sonny's research was funded with grants from federal agencies, including USDA, NSF, NIH, EPA, and USAID, and from state agencies, commodity groups, and industry. He has published over 150 journal articles, book chapters, and a book, and has a patent. He has received a number of awards and honors, including being named Fellow of the American Association for the Advancement of Science, Fellow of the Entomological Society of America, and Distinguished Graduate Alumnus of Rutgers University.

Sonny received a Bachelor of Science in agriculture and a Master of Science in entomology from the University of Agricultural Sciences, Bangalore, India, and his doctorate in entomology from Rutgers University. He is also a graduate of the University of Nebraska's New Academic Chair's Program and Harvard University's Management Development Program.

ECONOMIC RESEARCH SERVICE**Statement of Dr. Mary Bohman, Administrator
Before the Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies**

Mr. Chairman and members of the Subcommittee, I appreciate this opportunity to present the 2015 President's Budget request for the Economic Research Service (ERS).

The mission of ERS is to inform and enhance public and private decision making on a broad range of economic and policy issues related to agriculture, food, the environment, and rural development. ERS is a trusted, go-to resource for objective information, data, and unique economic and social science analysis on these topics. The ERS program anticipates the needs of decision makers by applying economic and social science research to address important emerging issues of the day. Our research touches the obesity epidemic, child nutrition, drought adaptation, trade talks, changing farm structure, climate change, and rural population loss.

The key decision makers served by ERS's research program and products are those who routinely make or influence public policy and program decisions. ERS shapes its program to serve the needs of this clientele, which includes White House and USDA policy officials and program administrators/managers; the U.S. Congress; other Federal agencies and State and local government officials; and domestic and international agricultural, environmental, consumer, and other public organizations, including farm and industry groups interested in public policy issues.

The President's FY 2015 budget request for ERS's research programs of \$83,446,000 represents a net increase of \$5,388,000 from the agency's FY 2014 enacted appropriation. The budget request funds ERS's core programs and expands by \$1,000,000 an FY 2014 program enhancement, *Research Innovations for Improving Policy Effectiveness*, which is related to key Administration priorities. The budget request includes \$7,727,000 for decentralized GSA and security payments. Formerly these costs had been funded centrally. Our proposed budget

supports agricultural research investments that are critical to long-term economic growth and job creation.

Funding is requested to continue ERS's highest priority core programs. These include research, data, and market outlook on the following: How investments in rural people, businesses, and communities affect the capacity of rural economies to prosper in a changing global marketplace; economic issues related to developing natural resource policies and programs that respond to the need to protect the environment and the challenges of climate change while enhancing agricultural competitiveness; production agriculture, domestic and international markets, trade, and Federal farm policies, to understand the U.S. food and agriculture sector's performance in the context of increasingly globalized markets; the Nation's food and nutrition assistance programs, to study the relationships among factors that influence food choices and health outcomes, including obesity; and to enhance methodologies for valuing societal benefits associated with reducing food safety risks.

ERS develops its research program in coordination with other REE and USDA research agencies. Our activities support the goals and objectives of the REE Action Plan by providing an economic perspective to USDA science research that addresses key priority issues, such as pollinators and bee health, antimicrobial resistance, and human nutrition. Looking forward, ERS will collaborate with partners on these and other issues through the new, multidisciplinary innovation institutes mentioned by Dr. Woteki.

Investment in effective delivery of our work products is a high priority. We continue to improve how our customers can access our information. For example, our new web publication *Charting the Essentials* tells the story of the American agricultural and rural economies, food spending and prices, and the interaction of agriculture and natural resources through charts and key indicators. As part of USDA's Open Data Initiative, ERS recently launched new services that enable developers, bloggers, and other digital professionals to access the agency's web content to build applications and provide ERS content on their sites.

ERS research that informs programs and policies eventually touches the individual citizens who breathe the air, drink the water, live and work in rural towns, and plan their diets and food budgets. Our research, moreover, touches those who depend on school lunches, on SNAP, and

on Federal and State rural development programs. It benefits farm and rural businesses from small to large, as they are affected by policies and programs.

Addressing the Needs of Decision Makers

The agency's research program both anticipates and responds to decision makers' information needs through direct analyses and the development of analytic methods and supporting data. During FY 2013, ERS conducted a comprehensive review of its data and dissemination methods to develop a forward-looking vision that provides high-quality, objective, timely, and useful statistics, indicators, and research data. In FY 2013, ERS launched a review of its Market Outlook Program to obtain an objective assessment of the demand for market outlook analysis across stakeholder groups and identify program options to best meet these demands. In FY 2014, ERS will launch a 5-year cycle of program reviews to ensure the quality and effectiveness of its programs, starting with a review of the economics of diet, nutrition, and health.

ERS conducts research on specific topics at the request of Congress and USDA policy officials to assess the socio-economic consequences of public policies, regulations, and programs. These studies build on the agency's analytic methods, data resources, and highly skilled staff. Recent examples include analyses of child nutrition programs and immigration. Looking forward, in response to Congressional requests ERS will deliver research on the economics of pollinators and local foods.

School lunches have had to meet new nutrition standards under the Healthy Hunger-Free Kids Act of 2010 since fall 2012. ERS has provided research to support the Food and Nutrition Service rule-making process and to understand the potential implications. ERS examined whether students who attended schools serving more fruits and vegetables, in amounts that would meet the new standards, actually ate more of them than students in schools that did not. Another study examined U.S. students' selections of competitive foods, their contribution to school foodservice revenues, and how stricter nutrition standards would change that contribution. ERS-supported behavioral economics research on USDA school meal programs found that creating a "healthy express" school lunch line raised sales of healthy items and lowered sales of unhealthy foods.

In 2013, immigration reform was a policy issue for Congress, the Administration, and USDA. ERS tracks demographic and economic trends for hired farm workers, and the importance of international migration to the size and composition of the U.S. farm labor population. In collaboration with the Office of the Chief Economist, ERS continued to update a model of the U.S. economy used to evaluate how changes in the supply of foreign-born labor might affect agricultural output and exports, wages, employment, and national income, and to implement simulation of specific policy proposals. Findings from published research and analysis were used in briefings to support decision making on immigration policy and in a Federal Government report on the benefits of international migration for agriculture and rural communities.

While ERS's research program addresses specific policy requests, it also anticipates the needs of decision makers and conducts research that is then available to respond to the issues of the day. The examples that follow document how customers and stakeholders in USDA, Congress, related government agencies, and the public use ERS information to make decisions.

Improving the Effectiveness of Outreach on the SNAP Program

In 2013, ERS published a study linking Supplemental Nutrition Assistance Program (SNAP) data from Texas with socioeconomic data from the American Community Survey to estimate SNAP access rates for demographic subgroups at both the State and county level. The findings help the Food and Nutrition Service better target outreach. This research employed an innovative methodology to link administrative data from SNAP with other socioeconomic datasets; this project represents the kind of initiative that will be expanded using funds from the FY 2014 budget initiative that we propose expanding in FY 2015.

Monitoring Farm Sector Financial Health

ERS plays a leading role in monitoring the financial health of the farm sector, including the performance of farm businesses and the well-being of farm households. These core statistical indicators provide guidance to policymakers, lenders, commodity organizations, farmers, and others interested in the financial status of the farm economy. ERS's farm income statistics also inform the computation by the Bureau of Economic Analysis in the Department of Commerce of agriculture's contribution to the gross domestic product for the U.S. economy.

Agricultural Structure and the Changing Face of Farming

U.S. crop production has been shifting to larger farms for most crops during the past three decades. ERS research shows that, despite this shift, family farms continue to dominate U.S. crop production, accounting for 87 percent of the total value in 2011. Technology has helped drive cropland consolidation and will play a continuing role in the future structure of farming. As U.S. agriculture evolves, who will farm in the future? ERS research finds that beginning farmers and ranchers have declined as a share of all farmers and that their average age has risen. They tend to operate smaller farms and are more likely to work off the farm than established operators. Beginning farmers often report that their biggest challenge in getting started in farming is to access enough capital and farmland to operate at a profitable size. This research informs the types of programs that could increase the probability of success by beginning operators.

China's Role in U.S. Agricultural Exports

China continues to be an important market for U.S. agricultural products. ERS research has identified China as the most prominent example of a developing country that has transitioned from taxing to supporting agriculture and examined how World Trade Organization commitments shaped China's agricultural policies over the last decade. Research findings suggest that China's agricultural subsidies and price supports may actually improve prospects for U.S. agricultural exports by raising the costs and prices of Chinese commodities above international levels. The emergence of agricultural support in developing countries like China poses a challenge to efforts to reduce global distortions in agriculture.

Diet Quality

Research has shown that SNAP effectively reduces food insecurity, but questions remain about the extent to which program participation affects the diet quality of adults. A new ERS research report finds mixed evidence as to whether SNAP participation is beneficial or adverse regarding diet quality: the study found that SNAP increases the likelihood that participants will consume whole fruit but also induces participants to decrease their intake of dark green/orange vegetables by a modest amount.

The size and severity of the Great Recession provided an opportunity to examine how relatively large changes in employment and income affect food purchase decisions and, in turn, diet quality. ERS research found that in response to the 2007-9 recessions, U.S. households cut spending on a number of consumables, including meals and snacks away from home. Working-

age adults ate less food prepared away from home, cut caloric intake, and improved their diet quality. However, improved diet quality is not attributed only to a decrease in eating out; greater focus on nutrition and perhaps improved nutritional quality of available foods also contributed.

Food Security and Disability

Recent ERS research analyzed the prevalence of food insecurity by individuals with a range of types of disabilities. Food insecurity was most prevalent among households with an adult who was not in the labor force due to a disability, followed by households with a working-age adult with other reported disabilities. Households with no working-age adult with a disability had a much lower prevalence of food insecurity. Close to two in five households with very low food security included an adult with a disability. The study findings demonstrate the importance of disabilities as a determinant of food insecurity.

Rural Veterans

Nearly 4 million veterans reside in rural America, over 10 percent of the rural adult population, according to a recent ERS report. The rural veteran population is older on average than the rural adult population as a whole, and the share of women and racial/ethnic minorities among the veteran population is increasing. Although some rural veterans face employment obstacles due to health issues, they tend to have more education and higher incomes than their nonveteran peers and are more likely to work in higher skill industries such as professional and business services, transportation and utilities, and manufacturing. ERS analysis and data support USDA's outreach efforts to rural veterans and in particular, to those new farmers and ranchers who are veterans and returning veterans. ERS' research provides policy makers and the farm community with information on the financial performance and farm structure of beginning farms, relative to established farms. Our research also identifies the challenges faced by beginning farmers and beginning veteran farmers in today's agricultural economy.

Conservation and Drought

Programs like the Conservation Reserve Program (CRP) and the Environmental Quality Incentives Program play a role in drought preparedness and climate adaptation even if they do not directly target such activities. ERS research finds that a significant reason farmers participate in USDA conservation programs is to help mitigate risks from drought. If climate change increases drought risk, demand from farmers to participate in the programs may increase.

Examples of Research Proposed for Funding in FY 2015

ERS received funding for its FY 2014 initiative, *Research Innovations for Improving Policy Effectiveness*, which will strengthen its ability to conduct 21st-century research that supports improving USDA policy effectiveness. The initiative adopts two innovative strategies—the use of behavioral economics and the statistical use of administrative data that are collected for programmatic or regulatory purposes—to address critical information gaps that hinder policy effectiveness. In FY 2015, ERS proposes to expand internal expertise, support collaboration with USDA program agencies, and form partnerships with extramural researchers to: (1) fund experiments that incorporate concepts from behavioral economics, identifying high (and low) performing options without the costs associated with new program implementation; and (2) create and evaluate unique merged administrative data systems by linking multiple sources, assessing statistical properties, and analyzing the merged data for policy-relevant research. Results of the initiative will provide science-based evidence that informs decision making by policymakers and program managers in Congress, USDA, and across Federal and State governments.

ERS intends to look beyond the immediate horizon to conduct anticipatory research, the findings of which will be available when a topic “heats up.” This research supports the REE Action Plan and is often planned in concert with USDA research partners, such as for pollinators through the USDA Honey Bee Health/Colony Collapse Disorder Steering Committee and anti-microbial resistance. Other ERS priorities for research that will deliver findings in 2015 and beyond include drivers of job creation in rural America, issues arising from debate and deliberation on the 2014 Farm Bill, and the impact of globalization on U.S. agriculture.

Research on the Economics of Pollination: Pollinators are critical for a sustainable ecosystem and the pollination of crops across the country. ERS participates in USDA’s Pollinator Working

Group and provides research and analysis on the economics of pollination and alternative approaches to protect and improve pollinator health. Topics under investigation include the role of land under the CRP and the economics of alternative management systems.

Antibiotics Use in Livestock Agriculture: There is growing concern that widespread use of antibiotics has led to the emergence of organisms that are resistant to most or all antibiotics, thus posing a significant human health risk. As a result, pressure is growing to reduce the use of antibiotics in livestock agriculture for purposes of disease prevention and growth promotion. The Food and Drug Administration (FDA) has announced a new guidance intended to phase out uses for growth promotion, and food retailers are separately imposing their own limits. Drawing on data from USDA's Agricultural Resource Management Survey (ARMS), ERS will assess how restrictions on antibiotics use will affect producers and markets.

National Household Food Acquisition and Purchase Survey (FoodAPS): FoodAPS is a national survey of household food purchases and acquisitions that provides data about household food choices that are not available from any other current government survey. Information was collected about foods purchased for consumption at home and away from home as well as foods acquired through food and nutrition assistance programs (both public and private). The data will be made available for researchers beginning in 2014, and reports of Americans' eating habits will be published by late 2014. In FY 2015, ERS plans to hold a conference highlighting findings from its own and academic research using the data. Researchers will continue to use FoodAPS to probe the relationship between food choices and nutritional quality.

Innovation in Rural Businesses: Innovation is regarded as the key to economic prosperity. Conventional wisdom is skeptical of the innovative capacity of rural areas. Analysis of the Rural Establishment Innovation Survey data that will be collected in 2014 will provide the first robust estimates of substantive innovation in rural and urban tradable sectors. Analysis of establishment and community characteristics associated with substantive innovation such as human capital and the availability of broadband will inform programs and policies for creating jobs, developing new markets, and increasing competitiveness for rural businesses and communities.

Impacts of "Shallow Loss" Support Payments on the Demand for Federal Crop Insurance: ERS will examine how the availability of shallow loss supports in the 2014 Farm Bill may affect

producer demand for Federal crop insurance. The new Revenue Loss Coverage and Supplemental Coverage Option programs may affect both the number of acres insured and insurance coverage rates. Research will assess the potential for overlap in coverage between the new programs and crop insurance programs.

Agricultural Productivity Growth in the United States and Abroad: Comparison of Metrics and Drivers: Continued productivity growth is essential to avoid substantial price increases and environmental stresses in the face of increasing global demand for agricultural commodities. ERS produces annual estimates of agricultural productivity for the U.S. and works with allied groups to produce consistent international measures for a panel of countries. In FY 2015, ERS will provide estimates of productivity growth across countries, evaluate performance relative to the U.S., and investigate the sources of differences across countries.

Agricultural Trade and Trade Partnerships: ERS will examine how a Trans-Pacific Partnership (TPP) agreement could affect both U.S. and third-country beef exports to Japan. Japan is one of the largest meat importing countries in the world and a major market for U.S. exports. Japan currently imposes relatively high tariffs on beef to protect domestic producers, and officials have identified this sector as one of the five most sensitive sectors in the ongoing TPP negotiations. ERS will also examine the potential benefits from reducing domestic and trade policy distortions under the Transatlantic Trade and Investment Partnership between the U.S. and the European Union.

Policy Options for Increasing the Provision of Ecosystem Services from Agriculture: ERS has a broad program of research on the design and implications of markets for ecosystem services, such as greenhouse gasses and water quality. Research will examine the economic and environmental implications of alternative approaches to designing environmental markets. Specific projects will focus on the potential role of auctions, bidding, and other forms of economic and informational incentives in increasing environmental benefits obtained through conservation programs. A second set of projects will focus on behavioral interventions to increase farmer enrollment offers in conservation programs.

Findings from USDA Economic Surveys of Certified Organic Field Crop Producers: ERS will examine the structure and profitability of organic grain production using national producer

surveys, each including a targeted sample of organic growers. Despite numerous experimental field trials, little information is available about the relative costs and returns of organic grain (corn, wheat, soybeans) production. This research will identify similarities and differences in the characteristics and production costs of commercial organic and conventional field crop producers and shed light on whether certified organic production offers alternatives to generate higher returns for commodity producers with a limited resource base, who might otherwise exit.

How Much Do Americans Pay for Fruits and Vegetables? ERS maintains the Fruit and Vegetable Prices database. In FY 2015, average prices per pound or pint for over 150 products as purchased at retail stores will be estimated using 2012 scanner data to update the previous 2008 estimates along with the costs for a cup-equivalent of each of these same fruits and vegetables as consumed. These new estimates will inform the committee currently planning the update of the *Dietary Guidelines for Americans for 2015*.

Effects of Expanded Categorical Eligibility, Income Volatility, and Other Policy Changes on SNAP Access: In the 2000s, many States expanded the definition of SNAP eligibility to include individuals who qualified for noncash assistance from Temporary Assistance for Needy Families or related programs. These policies raised the gross income limit and removed the asset limits in many States. Some ascribe the large rise in SNAP caseloads since 2008 to these policies, while others find that changes in unemployment explain most of the increase. This research will use SNAP administrative data from States and link it to a longitudinal household survey that includes a fuller set of variables to estimate eligibility than previous data applied to answer this question.

Food Safety Modernization Act (FSMA) and the Fresh Produce Industry: FSMA is the most extensive food safety legislation since the 1950s for FDA-regulated food. It includes onfarm regulation of produce production, extends Hazard Analysis and Critical Control Points (HACCP)-like requirements to food and animal feed facilities, and addresses import safety through a combination of third-party certification and government audits. ERS will examine the effects of FSMA across the fresh produce supply chain, including the guidance issued by FDA as it relates to the development of a risk-based food safety system.

Mr. Chairman, this concludes my statement of ERS's budget request for FY 2015. I will be happy to answer any questions that the Subcommittee may have.

Biography: ERS Administrator Mary Bohman.



Dr. Mary Bohman is Administrator of the Economic Research Service. From 2005 to 2011, she served as Director of the Agency's Resource and Rural Economics Division. She joined ERS in 1997 and has served as Deputy Director for Research in ERS's Market and Trade Economics Division (MTED) and as Chief of MTED's Europe, Africa, and Middle East Branch. Other public-sector positions held include details to the White House Office of Science and Technology Policy and to USDA's Under Secretary for Farm and Foreign Agricultural Services. From 1990 to 1997 she was on the Agricultural Sciences faculty at the University of British Columbia.

Dr. Bohman received her Ph.D. from the Department of Agricultural Economics, University of California, Davis and her B.S. from the School of Foreign Service, Georgetown University.

Dr. Bohman is a member of the Agriculture and Applied Economics Association, Association of Environmental and Resource Economists, Global Steering Committee for the UN Global Strategy to Improve Agricultural and Rural Statistics, and the International Association of Agricultural Economists.

NATIONAL AGRICULTURAL STATISTICS SERVICE**Statement of Dr. Cynthia Clark, Administrator
Before the Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies**

Chairman Aderholt, Ranking Member Farr, and members of the Subcommittee, I appreciate the opportunity to present the President's 2015 Budget request for the National Agricultural Statistics Service (NASS) 2015 budget request. NASS administers the U.S. Agricultural Estimates program, which began at the United States Department of Agriculture (USDA) in 1863. Since 1997 NASS has conducted the quinquennial U.S. Census of Agriculture, first collected by the Department of Commerce in 1840. Both the agricultural estimates and the census program align with the basic mission of NASS to provide timely, accurate, and useful statistics in service to U.S. agriculture.

Major Activities

Annual Surveys and the Census of Agriculture. The primary activity of NASS is to provide reliable data to meet the decision-making needs of the agricultural industry. The agency fulfills its mission through an annual agricultural estimates program and the quinquennial census of agriculture. Farmers, ranchers, and agribusinesses voluntarily respond to a series of nationwide surveys about crops, livestock, prices, chemical use, and other agricultural activities each year. Surveys are conducted during the growing season to measure the impact of weather, pests, and other factors on crop production. In many cases, NASS supplements farmer surveys with field observations and measurements of plant counts. NASS also uses administrative data from other USDA, Federal and State agencies; data on imports and exports; and other survey data to ensure official estimates accurately represent agricultural inventories. NASS prepares estimates for over 120 crops and 45 livestock items that are published annually in more than 400 separate reports.

International Programs. NASS provides technical assistance and training to improve agricultural survey programs in other countries in cooperation with other government agencies on a cost-reimbursable basis. The NASS international program focuses on developing and emerging-market countries in Asia, Africa, Central and South America, and Eastern Europe. NASS assists countries in applying modern statistical methodology, including sample survey techniques. Accurate information about other countries is essential for successfully marketing U.S. farm products throughout the world. NASS has been an important contributor to the U.N. Global Strategy for Agricultural and Rural Statistics, and to the U.S. Feed the Future Program, contributing to better statistics for USDA global estimates of food supply.

Stakeholder Input. NASS annually seeks input from the public on determining priorities and improving its products and processes. It consults with customers and stakeholders through meetings of the Secretary of Agriculture's Advisory Committee on Agriculture Statistics, interaction with producers, data users meetings with agribusinesses and commodity groups, special briefings for agricultural leaders during the release of major reports, and numerous individual contacts. In response to this input, NASS continues to improve the quality and accessibility of its reports. The agency has adjusted its agricultural estimates program and published reports, and has expanded electronic access capabilities. All reports issued by NASS' Agricultural Statistics Board are made available to the public at a previously announced release time to ensure equal access to the information. All national statistical reports and data products, including graphics, are available on the Web, as well as in printed form, at the time they are released. Customers can electronically subscribe to NASS reports and download them in an easily accessible format using standard software. NASS also provides free Rich Site Summary (RSS) and podcast feeds to interested data users, who receive an alert or audio clip when content of interest is posted to the NASS Web site. A summary of NASS and other USDA statistical data is produced annually in USDA's *Agricultural Statistics*, available on the NASS home page, on CD-ROM disc, or in hard copy.

Collaboration with Other Agencies. NASS conducts special surveys and provides consulting services for USDA agencies, other Federal or State agencies, universities, and agricultural organizations on a cost-reimbursable basis. Consulting services include assistance with survey methodology, questionnaire and sample design, information resource management,

and statistical analysis. NASS has assisted USDA agencies in programs that monitor nutrition, food safety, environmental quality, and customer satisfaction. In cooperation with State Departments of Agriculture, land-grant universities, and industry groups, NASS conducts over 150 special surveys each year covering a wide range of issues such as farm injury, nursery and horticulture, equine, farm finance, fruits and nuts, vegetables, and cropping practices.

For example, NASS conducts the Agricultural Resource Management Survey (ARMS) in collaboration with USDA's Economic Research Service. ARMS data are the primary input for the Nation's farm income statements—one of the country's federal principal economic indicators. These data are the basis for much of the targeted analysis conducted by USDA economists on the Farm Bill and other important issues. NASS conducts a periodic labor survey for the Department of Labor that provides vital labor statistics used in the H-2A temporary agricultural worker program. The Natural Resources Conservation Service (NRCS) and NASS have also collaborated together to conduct the Conservation Effects Assessment Program (CEAP). This is a multi-agency effort to quantify the environmental effects of conservation practices and programs and develop the science base for managing the agricultural landscape for environmental quality. The latest release of the NRCS Chesapeake Bay Conservation Assessment Report showed significant progress made from the conservation efforts of the Chesapeake Bay Region.

An Enhanced Research Program. NASS is conducting a number of statistical and survey research projects to improve methods and techniques for collecting, processing, and disseminating agricultural data.

NASS is examining model-based estimation techniques to improve the statistical reliability of published forecasts/estimates and to provide accurate error measures. A model that incorporates multiple data sources, including current and historical data, and administrative/auxiliary information is being developed for state-level corn and soybean yields. Time series techniques are being utilized to model estimates of hogs and pigs as well as cattle. Small area estimation techniques were examined to model county-level estimates of cash rental rates for pastureland, irrigated cropland, and non-irrigated cropland; harvested corn and soybean acreage; and corn and soybean yield. Several models transferred from research to development and will be operational later this year. NASS has worked collaboratively with consultants from outside of the agency to develop the methodology for all of these endeavors.

NASS uses its area frame both as a stand-alone frame to estimate numbers of farms and a wide variety of commodities, and as a measure of incompleteness for its list surveys -- including the quinquennial Census of Agriculture. The Agency's area frame estimates of the numbers of farms for 2007 were less than those from its dual-frame 2007 Census of Agriculture, requiring further analysis of the area frame and dual-frame data collection procedures and estimates to reconcile the differences. New methods that use the census mailing list in census years and the list frame in non-census years to adjust the area frame's estimate of the number of farms for misclassification are being developed. Measures of uncertainty for the resulting estimates were produced for the 2012 Census of Agriculture.

NASS is exploring methods to identify operations for which it is most unlikely to obtain responses in future surveys during data collection. Classification tree models have been developed for the Crops/Stocks and ARMS surveys to assign scores for the strong tendency for nonresponse to survey sample cases. Methods to adaptively use this information to manage data collection have been developed and are being used to obtain responses more efficiently. Future research will evaluate methods of using this information in statistical estimation.

NASS began using the Computer Audio Recorded Interview (CARI) system developed by the Research Triangle Institute for the U.S. Census Bureau in its National Operations Division calling center. The system is intended to improve data quality by allowing evaluation of both data collection instruments and interviewers. NASS continues to evaluate its use of CARI and to train enumerators to obtain optimum results.

George Mason University and NASS completed the work on a National Aeronautics and Space Administration (NASA) competitive grant titled "A National Crop Progress Monitoring System Based on NASA Earth Science Results." NASS primarily benefited from the technology development which supports the web portal VegScape. The research showed that the vegetative indices (color gradations) are not sufficient to determine the vegetative and reproductive stages of the crops. The web portal VegScape is most useful to identify the green-up and senescence of the crops. VegScape is one of the analysis tools NASS uses to validate and verify survey estimate results. VegScape is one to the tools available to the public and is used by researchers, farmers, and ranchers.

NASS completed its fifth 48 state Cropland Data Layer (CDL) in 2014 for the 2013 crop year. Additionally, NASS went back, for historical reference, and processed the 2008 CDL, making six years of CDL data available.

2015 Budget

The agency's 2015 Budget request is \$179 million, of which \$131 million is for the Agricultural Estimates Program and \$48 million is for the Census of Agriculture Program. This funding level is necessary to pay for the decentralized GSA rent and security costs (\$9.2 million), formerly financed centrally by USDA, to restore some previously suspended programs, to support new initiatives for the Agricultural Estimates Program, and to continue with a robust set of follow-on studies within the Census of Agriculture Program.

Agricultural Estimates

The over four hundred of agricultural estimates reports NASS issues annually are critically important to assessing current supply and demand in agricultural commodities. Producers, agribusinesses, farm organizations, commodity groups, economists, public officials, and others use the data for decision-making. The statistics NASS collects and disseminates ensure buyers and sellers have access to the same official statistics at the same pre-announced time, making markets fair and preventing them from being influenced by "inside" information. The free flow of information minimizes price fluctuations for U.S. producers, makes commodity markets more efficient, and makes our Nation's agricultural industry more competitive. The data has become increasingly important as producers rely more on world markets for their sales.

NASS proposes an increase in funding to support the Pollinator Health Initiative and to provide information associated with Colony Collapse Disorder (CCD). This key government-wide initiative is funded by several USDA agencies as well as other Cabinet level Agencies. USDA and the Environmental Protection Agency (EPA), in consultation with other Federal partners, are scaling up efforts to address the decline of honey bee health with a goal of ensuring the recovery of this critical subset of pollinators. NASS supports this USDA – EPA

CCD National Action Plan, which emphasizes the importance of coordinated action to identify the extent of and causal factors in honey bee and pollinator declines.

As part of this effort, the requested funding will allow NASS to focus its resources and expertise, to expand its annual survey of bee keepers. This survey will include questions related to colony losses, pests and parasites, management practices, crops pollinated and locations served, as well as estimates of revenues and expenses. Expansion of the loss survey of beehives was strongly encouraged by beekeepers, the National Academy of Sciences, and the USDA Office of Inspector General. This action will provide improved baseline and annual data to determine the extent of CCD, in addition to providing quantitative information on potential causal factors, essential to the industry.

A Geospatial Improvement Initiative is proposed for FY 2015. This new program will enhance the current satellite based agricultural statistics monitoring program. It will research and institute systems to provide satellite based crop condition, soil moisture, crop progress (phenological development of crops), crop yields, and begin research and development to provide data on emissions of greenhouse gasses associated with agriculture at local levels. This will leverage strategic cooperative partnerships with USDA Climate Hubs and the National Oceanic and Atmospheric Administration Regional Climatic Centers.

In 2012 the chemical use program crop rotations were changed so that individual crops were surveyed less frequently in response to funding reductions. In 2015 NASS proposes to restore the chemical use data series to the 2011 level, including more frequent data on major row crops, and fruit and vegetable chemical use data on an alternating year basis. Appropriated funding is necessary for this initiative to ensure equal access to Federal statistics. The statistical data provided by NASS enhances the competitiveness and sustainability of rural farm economies by leveling the playing field. All parties have equal access to official statistics.

The chemical use data collected by NASS have been used in building a database for the USDA Pesticide Data Program. This database is used by the Department to evaluate the safety of the Nation's food supply. Additionally, the implementation of the Food Quality Protection Act (FQPA), in 1996, increased the need for actual, reliable chemical use data. FQPA requires the Environmental Protection Agency (EPA) to conduct an accelerated review of tolerance levels for re-registration of pesticide products. Part of the review includes using actual chemical usage data that only growers can provide. The absence of these data has created

difficulties for EPA and industry to effectively conduct and analyze these reviews. In the absence of actual data, EPA is often in the position to assume maximum label rates are being applied on all acreage. This has the potential of over-estimating actual pesticide usage.

NASS restored the annual Fruit and Vegetable program in 2014 to fulfill data users' requests and to provide acreage statistics necessary for conducting the chemical use program. In 2015, NASS proposes to augment the annual Fruit and Vegetable program by providing the in-season forecasts for fruits and nuts. These are needed by industry and include a variety of reports including the monthly Crop Production reports, annual Cherry Production report, and the annual Cranberries report. For vegetables, NASS will resume publishing in-season forecasts in the fall. Additionally, NASS will resume publishing a preliminary Annual Summary for all noncitrus fruits and nuts in January. The annual data is required to conduct the fruit and vegetable chemical use surveys.

Census of Agriculture

The Census of Agriculture is taken every five years and provides comprehensive data on the agricultural sector at the national, State, and county level. The Census of Agriculture is the only source for this information on a local level and is extremely important to the agricultural community.

In addition to the 50 States, NASS is also publishing census data in Puerto Rico. NASS makes all data publicly available on its website. On February 20, 2014 NASS issued a preliminary release of 2012 Census of Agriculture data that contained high level estimates at the U.S. and State level. In May 2014 NASS intends to release the full Volume I series of data at the U.S., State and county level.

In addition to the in-depth large publication to be released in May 2014, a number of special tabulations are planned to be released subsequently. Those include State and county profiles; Congressional District Profiles; Watershed Publication; Race, Ethnicity and Gender Profiles and Specialty Crop Report.

NASS uses each Census of Agriculture as a sampling frame to conduct in depth mandatory studies on specific sectors of agriculture. In FY 2014 NASS is conducting the Farm and Ranch Irrigation Survey (FRIS) and the Census of Aquaculture. Data will be published from these surveys during FY 2015.

In FY 2015 NASS plans to conduct a Census of Horticulture. The Census of Horticultural Specialties was last conducted for the 2009 growing season. This project is a detailed examination of all operations identified from the Census of Agriculture with sales of \$10,000 or more. Production and sales data for fresh cut flowers, potted flowering plants, foliage plants, bedding plants, or cut cultivated greens are summarized. This census also collects data regarding expenses, growing area, and hired labor. This historic data series was also conducted in 1970, 1979, 1988, and 1998. NASS proposes to conduct the Census of Horticultural Specialties every five years as funding permits and the next one is scheduled for FY 2020.

The FY 2014 Appropriation Act, with language for NASS to conduct four Current Industrial Reports (CIR), provided NASS the legal authority to request sampling lists from the Department of Commerce and the Internal Revenue Service. The 2015 Budget request includes resources for NASS to continue producing these four vital reports that were formerly compiled by the U.S. Census Bureau, but were cancelled at the end of 2011. These surveys are part of the U.S. Economic Census Program as is the Census of Agriculture and, as such, are mandatory and required by law. Commodities covered in these reports include: Oilseeds, Beans & Nuts; Fats and Oils; Cotton; and Flour Milling Products. NASS will publish a preliminary progress report in September 2014 and plans to publish the first full CIR report in January 2015.

This request supports estimation requirements for NASS, Economic Research Service (ERS), the World Agricultural Outlook Board (WAOB), and the USDA Chief Economist. Private industry uses CIR data to monitor the effect of international trade on domestic production, evaluate the relationship between company and industry performances, market analyses, assess current business conditions, and plan future operations.

NASS will work in collaboration with ERS to conduct a survey under the Census of Agriculture to update data on land ownership and farm finance that was last collected in the 1999 Agriculture Economics and Land Ownership Survey (AELOS). NASS has renamed this

survey Tenure, Ownership, and Transition of Agricultural Land (TOTAL). This survey had been part of the Census of Agriculture program every decade until 1999. The Advisory Committee on Agriculture Statistics made the recommendation that this land ownership and farm finance survey was the top program to be reinstated in the Census of Agriculture cycle in 2015. Data in FY 2015 from this new survey would inform policy decisions for USDA programs linked to farm land ownership and rental arrangements, inform research on generational transitions in agriculture, and provide updated parameters for the National Accounts for agriculture that ERS provides the Bureau of Economic Analysis (Department of Commerce).

NASS and ERS have developed a new survey approach using the Agricultural Resource Management Survey (ARMS) and the June Area Survey across two fiscal years. With this two year methodology NASS will conduct a survey to build the list frame in 2014 as the first year and in 2015 as the second year NASS will conduct the TOTAL survey based on that list frame. Funding for the first year in 2014 will come from a reimbursable agreement with ERS. The survey results of this two-year collaborative effort between NASS and ERS would be available after data summary and analysis in late 2015.

In recent years, NASS has instituted a number of performance enhancing initiatives that capitalized on new statistical and survey methodologies to keep pace with an increasingly complex agricultural industry in a cost effective manner. In 2011, NASS opened the National Operations Division in St. Louis, Missouri. This new Division focused on streamlining and standardizing a number of survey processes. In 2012, NASS underwent a large stakeholder engagement effort with State departments of agriculture to negotiate a path forward that ensured sustained cooperative working relationships while finalizing a comprehensive field reorganization. The following year NASS implemented the reorganized field structure resulting in 12 regional centers that economize the way staff coordinate survey data collection, review record level data, and disseminate state level data products. During FY 2014 NASS has reorganized its headquarters divisions to better align its statistical methodological work and to increase the utilization of space.

At the same time NASS underwent other transformational changes its research program has undergone a reengineering that focused on increasing the knowledge base of staff with academic expertise in survey and statistical methodology. This investment in research has

allowed the organization to develop new statistical models for its estimating program; examine computer editing applications to replace manual review; expand modes of data collection to include Computer Assisted Personal Interviewing and Computer Assisted Web Interviewing; implement quality assurance protocols in routine operations; develop two new tools using remote sensing data -- CropScape and VegScape; and further benefit from computer based processing technology. NASS's dedication to research and continued process improvement will ensure the organization remains relevant and viable to fill the urgent need for timely, accurate, and useful statistics in service to U.S agriculture.

This concludes my statement, Mr. Chairman. Thank you for the opportunity to submit this statement for the record.

BIOGRAPHICAL SKETCH

Dr. Cynthia Clark
Administrator

National Agricultural Statistics Service



Dr. Cynthia Clark is Administrator of USDA's National Agricultural Statistics Service (NASS), overseeing the agency's efforts to collect and disseminate data on every facet of U.S. agriculture.

Clark is an accomplished statistician who is highly respected both in the United States and overseas for her expertise in survey research and development. Before joining NASS, she directed statistical research and survey methodology for the United Kingdom's Office for National Statistics and, prior to that, at the U.S. Census Bureau.

Clark has strong roots in agricultural statistics, having previously spent 13 years working on the Census of Agriculture and serving as the Director of the NASS Census and Survey Division. She has also served in numerous professional positions with the American Statistical Association (ASA), the International Statistical Institute (ISI) and the International Association of Survey Statisticians. Additionally, she is a fellow of the ASA, an elected member of ISI and a Fellow of the Royal Statistical Society.

Under Clark's leadership, NASS conducts hundreds of surveys and issues nearly 400 statistical reports each year with data on production, economics, demographics, and the environmental that is relevant to agriculture. NASS also conducts the Census of Agriculture every five years, providing the only source of uniform, comprehensive agricultural data for every county in the nation. She has led a transformational change at NASS impacting the agency business model, organizational structure, technology infrastructure, and statistical practice.

Clark was raised in Colorado, the daughter of an agricultural banker. She received a bachelor's degree in mathematics from Mills College in California, a master's degree in mathematics from the University of Denver, and masters and doctoral degrees in statistics from Iowa State University. Her husband, Glenn, grew up on a livestock farm and ranch in southeastern Idaho. She and her husband are the parents of six children and grandparents of fifteen. They make their home in McLean, Virginia.

RESEARCH INFORMATION SECURITY

Mr. ADERHOLT. Let me start out, and I will ask about something that we heard earlier this year. The inspector general issued a report on the effectiveness of your agency's lockup procedure to ensure the security of sensitive information on commodities.

The inspector general, from my understanding, complimented the National Agricultural Statistics Service on a swift response, but tell the subcommittee why it took an audit to bring these issues to light.

Dr. WOTEKI. Well, Mr. Aderholt, we take our security and our lockup procedures very, very seriously, and the National Ag Statistics Service has, over the years, improved their approaches towards security. I would like to ask Dr. Clark to tell you specifically the steps that they have undertaken in response to this recent audit.

Mr. ADERHOLT. Okay.

Dr. CLARK. We take our security very, very seriously, but you need to understand that we are working in an environment where technology is constantly changing, and in order to meet the release time, which is to the minute, to the second even, we need to be on top of all of our security procedures.

We did have an incident several years ago where we had a switch failure, which caused an early media release and since then we have been doing a number of different things to enhance our security. We have, most recently, installed a scanning procedure for people going in to pick up iPhones, or any computers, or any other equipment. We have cameras at the entrance of our lockup procedure. We have enhanced the procedures in our area where the media is located to ensure that no release can happen except at the time when it is scheduled.

The audit asks for us to have an external review on an annual basis, and we have had several reviews in the last year; and also to have an internal review committee that is periodically looking at our security procedures. So this is what we are planning to do, and we will be keeping on top of it, and we also work with other statistical agencies. In fact, our procedures are probably the most secure of all of the agencies.

Mr. ADERHOLT. Now, I know that the inspector general's report noted that management decisions have reached—been reached some 14 of 17 recommendations?

Dr. CLARK. Yes.

Mr. ADERHOLT. And what is the status of those remaining?

Dr. CLARK. Most of them are all in progress or—and completed. We provided dates at which they would be completed. They would all be completed by October of 2014, and they are all on the way.

Mr. ADERHOLT. So you feel confident that the problems found by the inspector general have been addressed at this point?

Dr. CLARK. Yes.

Mr. ADERHOLT. And what would be the result of a leak of this sensitive data?

Dr. CLARK. Well, it is market-sensitive data, and you have trading that goes on within seconds of the time of the release, and the media—we have allowed media to have access to our lockup procedure. They provide reports. We provide data that goes out exactly

at the time of release. But if you have a breach of security, then it affects the markets.

INNOVATION INSTITUTES

Mr. ADERHOLT. Okay. The budget proposes \$75 million in new funding to create three new innovative institutes. I understand this proposal is based on the recommendation from the President's Council of Advisors on Science and Technology. Just talk a little bit about the innovation institutes and their connection with the 2014 farm bill. That was not in the farm bill; is that correct?

Dr. WOTEKI. That is correct.

Mr. ADERHOLT. And—

Mr. FARR. Food Safety Modernization Act probably.

Mr. ADERHOLT. Were they proposed by the administration, and have they been debated at Congress at all at this point?

Dr. WOTEKI. Well, I think we are having that discussion right now as part of our budget request. The innovation institutes were recommended to the President by his Council of Advisors on Science and Technology, and they did an in-depth study of the challenges that are facing American agriculture. And we are asking the question, is our research infrastructure up to those challenges, and if not, what are the things that we need to be doing differently? And one of their recommendations was to establish what they called a new innovation infrastructure that would take us into closer working relationships with the private sector and really focusing our efforts on some of the big problems and big challenges.

So the innovation institutes are essentially a reflection of that recommendation to the President. The advisors had recommended the establishment of six innovation institutes, each one to be funded at the level of \$25 million a year for a period of 5 years minimum, and that these innovation institutes should be public-private partnerships so that they would be—the research agenda would be determined in close consultation with the private-sector contributors to the innovation institutes.

Mr. ADERHOLT. My time is up.

Mr. Farr.

FOOD SAFETY OUTREACH

Mr. FARR. Thank you very much, Mr. Chair.

I do think we also have to consider that the responsibility for this agency and our other FDA agencies are newly mandated under the Food Safety Modernization Act, and one of the questions I have is that one of the new programs that you mentioned under the extension of the food safety outreach is the Food Safety Outreach Program, which is a proposal to work with small and medium-sized farms.

I mean, they think this law is a big challenge to have to meet. They don't want to be priced out of the market. And I appreciate the fact that you are going to try to reach out to them to get them on board, but why just 2½ million bucks? That is for the whole country. That doesn't look like it can reach about anybody. What do you plan to do with that?

Dr. WOTEKI. Well, we have had ongoing discussions with the Food and Drug Administration about what is the role that our in-

tramural programs can play in helping them establish the evidence base for their programs, and also, more recently, what is the role that the extramural programs that are administered by NIFA can play. Out of those consultations has come this proposal for \$2.5 million, and I would like to ask Dr. Ramaswamy to talk with you in more detail about the content of that.

Mr. FARR. Is this more to deal with the coordination of all these programs, or it really is to use the money for outreach to small farmers?

Dr. RAMASWAMY. So, Congressman Farr, thank you so much, and thank you so much, Mr. Chairman, for having us here this morning. And indeed, you are correct. The intent is to use these funds that we are requesting to develop educational information in the form of outreach and extension for the small producers and small processors, and we will partner with FDA very closely in working with them, and also with the other agencies within USDA and outside of USDA as well to make sure that we are getting all the information put together to create this information.

Mr. FARR. Well, I am little concerned that it might be just Federal one size fits all. Remember, our States and local governments have a lot of regulation on farming practices, and California's standards are much higher than anything the Federal Government has, pesticide regulation, what you can and cannot use, setbacks. So I would hope that you might integrate these on a sort of regional basis, bringing in what the local laws also require.

Dr. RAMASWAMY. Indeed. So what we intend doing is to work through the Cooperative Extension Services; they are going to be very much involved in this.

Mr. FARR. Okay.

Dr. RAMASWAMY. And so as you currently pointed out, each State is a little bit different in terms of the rules and regulations and laws that they have, and so we would be working through that network and making sure that we are developing the knowledge and creating the delivery mechanisms as well.

Mr. FARR. I appreciate that.

Dr. Bohman, I was very interested and intrigued but to see the following statement near the end of your testimony: Quote, "ERS will examine the effects of FSMA across the fresh produce supply chain, including the guidance issued by FDA as it relates to the development of a risk-based food safety system."

Can you discuss how you are going to—is this research or how are we going to measure FDA's guidance, because there are some concerns as to the practicality of them.

Dr. BOHMAN. Well, thank you very much.

As you mentioned, the Economic Research Service has a group, a team that works on food safety issues that is collaborating with our experts on horticulture markets, and we are coordinating what we are doing with the USDA food safety group and with the economists at FDA.

I think our strength is that we can bring the realities of the markets and our economic expertise to these food safety issues. So we have been providing our expertise in terms of the internal rule-making process, and we are developing research that can look at what data we would need to understand how the rules are impact-

ing the industry, you know, what is working, what is not working, and start to build that research now as before and during the implementation of the Food Safety Modernization Act.

Mr. FARR. I think it would be very important to share that lessons learned with Congress, because I am afraid that what Members will do is hear from their local growers and then come in here and try to piecemeal the amendment to the Food Safety Act, and who knows what politics will be about? So, if you are ahead of the curve, and you are telling us that we can fix these things or you can fix them administratively would really be helpful to us.

Dr. BOHMAN. Well, thank you. That is—our plan is to make all our research results public, and we are happy to share our plans with you as they evolve.

Mr. FARR. My time is up. I will have to ask next round. I want to go into the horticulture issue.

Mr. ADERHOLT. Mr. Yoder.

Mr. YODER. Thank you, Mr. Chairman. And I appreciate all of your testimony today.

Dr. Ramaswamy, it is good to see a fellow Kansan or K State—

Dr. RAMASWAMY. Yes, sir.

Mr. YODER [continuing]. Background. We all had a rough weekend in St. Louis.

Dr. RAMASWAMY. Indeed. Indeed. Sorry about KU losing that.

Mr. YODER. Sorry about K State losing.

Dr. RAMASWAMY. What a bummer as well.

Mr. YODER. We thought our friends in Kentucky were our friends, but apparently they took out K State and Wichita State and—

Dr. RAMASWAMY. Indeed.

WHEAT AND BARLEY SCAB INITIATIVE

Mr. YODER [continuing]. So a tough weekend for all of us. But on to more important issues.

Certainly as a Kansan and someone who grew up on a farm and had a great appreciation for wheat, Kansas is the greatest wheat-producing State in the country, last year I expressed some concern over the administration's proposal to eliminate the U.S. Wheat and Barley Scab Initiative Research Project that funds a substantial portion of research at K State.

What does the future of this program look like? I believe there is over 5 million recommended in the—I think in the budget. What does the future look like in terms of the administration's support for this program, and what can I tell farmers back home regarding our ability to resolve some of these concerns regarding wheat and barley scab?

Dr. RAMASWAMY. So—go ahead.

Dr. WOTEKI. Well, I am happy actually to report to you, Mr. Yoder, that we have been able to restore funding for the Wheat and Barley Scab Initiative back to the 2011 levels in the 2014 budget. Then there really has been some very significant progress that has been made over the last several years coming out of what has been an extended research effort. It has focused on breeding, and there has been an increase in the varieties with resistance for this par-

ticular disease in wheat, as well as one barley variety with partial resistance that was released by ARS in 2011.

There is better information made available to farmers so that—coming out of the surveillance and monitoring activities, so that when they do apply fungicides, they can do it with a much better timing and help to head off an outbreak of scab. And that alert system goes directly to the farmer through an email or a text message.

So, we are really pleased that with the 2014 appropriation, that we have been able to restore these funds.

Mr. YODER. Well, I think that is welcome news, and I appreciate the message that sends, I think, to Kansas wheat farmers.

In terms of laboratories, what are the ARS's plans for upgrading regional small grains genotyping laboratories to next-generation genotype technology?

Dr. WOTEKI. Let me ask Dr. Jacobs-Young if she is prepared to answer that question.

Dr. JACOBS-YOUNG. Thank you for your question, Mr. Yoder.

So as you can see in the fiscal year 2015 proposal, we have \$155 million requested for a facility in Athens. Along with that facility, there are many other facilities that we have listed on our Capital Investment Strategy where we need to make significant investments to modernize those facilities. We are definitely supportive of the small grains facility, and we have been working to look at ways to use creative mechanisms to invest in those facilities.

I wanted to add on the wheat, we are also looking at the testing for wheat and trying to bring those up to date. We have a test that we use in the wheat quality laboratory that is 80 years old, and I think it is called the "falling number," and we feel there is a better way to do that, and so we are also looking at how we can—how we can bring that into the 20th—at least 21st century.

FOOD SURVEY

Mr. YODER. Well, I think certainly our efforts to modernize all this makes a big difference and, I think, speaks to how, with technology, we can create efficiencies and opportunities all across the country.

I had another question regarding the National Household Food Acquisition and Purchase Survey. I noticed that that was in the proposed budget. We have had some issues with other surveys in the Federal Government being mandatory, being compulsory, and having penalties and fines. Could you explain how this survey works; and is it voluntary, mandatory; and who would be being surveyed; and how it is effectuated?

Dr. BOHMAN. Yes. We are reporting for fiscal year 2015 that we will be publishing results from this survey—

Mr. YODER. Okay.

Dr. BOHMAN [continuing]. Which was conducted in 2012. And it was a voluntary survey that ERS and the Food and Nutrition Service funded and was carried out by Mathematica Policy Institute. And the goal is to provide a comprehensive overview of how people acquire food, not just what they buy in the grocery stores, what they eat out, what food may be given to them or that they acquire from a food pantry. And so we did a week-long diary with people who agreed to do this voluntarily, and we had made sure that we

included a large number of low-income respondents so we can look at questions that are in the public domain about what people eat who are part of the Supplemental Nutrition Assistance Program.

So we expect to have this data. It is in the final clearing stages by the end of May, and we will be publishing reports this year and into next year using that information.

Mr. YODER. Look forward to seeing the results.

Thank you, Mr. Chairman.

Mr. ADERHOLT. Ms. Pingree.

PLANT BREEDING

Ms. PINGREE. Thank you very much, Mr. Chair.

Thank you all for being here today and for all your hard work on behalf of consumers and farmers.

I am going to start with a question around plant and seed breeding. So, Dr. Woteki, I think probably this is for you, but I am happy to have anyone talk about it.

In the administration's fiscal year 2015 budget, the USDA proposes a new initiative on genetic improvement in translational breeding within the Agricultural Research Service. One of the target areas of funding is classical breeding, among other research areas.

I have a perspective representing a lot of farmers, having a small farm myself, and like a lot of other farmers, I am personally very concerned about farmers' dwindling options for locally adapted and publicly available seed varieties and animal breeds. I think that for agriculture to be successful in the long term, particularly given current trends, our farmers need access to seeds that are adapted to their local climate, pest conditions, and growing systems.

You also know that in order to be effective, the adaptation process needs to be ongoing, because climatic conditions and pest challenges are also constantly changing, and it seems like they are changing more rapidly now than they ever have before. So farmers increasingly need seeds that are bred in their local conditions and cropping systems. They need, in my opinion, seeds that are classically bred and available for public use.

So just to sort of continue with this thought, there has been extensive dialogue between concerned farmers like myself and the Administration regarding the implementation of the 2008 Farm Bill directive to make conventional plant and animal breeding a priority within the Competitive Research Program. So I appreciate that the Administration recognizes that this is a concern and has put in stronger language in the Fiscal Year 2014 request for applications within the Agriculture and Food Research Initiative.

So in spite of these small signs from the Administration and all the steps that you have taken over the last few years, it is clear, I think, that more needs to be done not only to ensure our Nation's future food security, but also to ensure that today's farmers, especially some of the young and beginning farmers engaging in the new opportunities out there for local and organic markets, have access to the highest-quality seeds that are bred for their types of farming conditions.

We are losing the pipeline of future plant breeders who will be essential in solving the pest and disease problems that the next

generation of farmers face, and, again, especially concerning some of our climatic uncertainties.

So, my question. I think there are a lot of grave concerns out there from all kinds of farmers. Can you talk a little bit about the USDA's efforts to reverse the trend of declining seed varieties, and how the new ARS initiative that you are proposing will help solve some of these problems or work towards it?

Dr. WOTEKI. Certainly. And I very much hear and understand your request. I also want to note that not only your voice, but many others have been approaching us, making this plea for a greater emphasis on classical breeding techniques.

In response we have done a couple of things. We held a workshop last year. We have actually posted the results of that. It was a listening session where there was a really broad spectrum of individuals and organizations that came in and spent a day talking with us about what they viewed as being the needs across the spectrum in plant breeding. But there were a lot of voices expressing concern about the diminishing—apparent diminishing interest on the part of our programs in classical breeding.

We don't feel that that perception is necessarily correct. We feel that in our programs, both the intramural ones and the extramural ones, that we are providing opportunities for researchers to put in proposals for funding in the—if they are in the extramural community, in the universities, to be funded by the National Institute of Food and Agriculture, and that also within the ARS programs, that there is a wide variety of breeding approaches that are taken from the classical through to the latest techniques in genetic—using the new genetic technologies.

So, we have established, though, as a follow-up to this listening session, a working group within the Department that is focused on plant breeding. And I have been meeting with that working group in recent weeks and have asked them to develop a roadmap on breeding approaches for us to be following.

So we hear the concerns, and we have taken these very positive steps of the listening sessions, and the internal working group, and now this roadmap. And in the meantime we also share your concerns about education and training, and the translational breeding initiative in this budget request is a key step for ARS, the in-house agency. In addition, NIFA, through the capacity funding that it provides to the State agricultural experiment stations that is in turn matched by the States is enormously important for doing exactly that local adaption breeding at the land-grant university that is so important in the State for farmers within that State. So that is another mechanism that we have of supporting classical efforts that are done really to come up with that locally adapted variety.

Mr. ADERHOLT. Okay. Mr. Rooney.

Ms. PINGREE. I am out of time, but I will follow up later. Thank you.

CITRUS DISEASE

Mr. ROONEY. Thank you, Mr. Chairman. I want to thank my friend from Kansas for—I understand, before I came in, he was singing the praises of the Florida Gators, and rightfully so, so I appreciate that. It takes a big man to admit greatness.

I just want to say, before I get into my questions, if I could, a couple of thank yous to the members that are sitting on this panel on behalf of the Florida citrus industry for your efforts in combating citrus greening and canker. Obviously, you all know the situation in my home State and now the situation for the rest of the country, so hopefully the efforts that you are undertaking right now will help save our industry.

I am happy to support your work here in Congress. As you know, the lines of communication with my office are open, with my staff, specifically the one back here with the orange shirt on. We are always in character.

So I also want to say a special thank you to Dr. Jacobs-Young for your efforts in hiring a new director in the ARS Fort Pierce lab. I have been down there numerous times, and I know how important that work is, and I really feel like, based on my visits there, that they are close to getting what they need. So this transition is important, so I appreciate all that you have done in getting the most qualified and best person to continue on, especially at this pivotal time.

I would like to ask a couple of quick questions, if I could, to Dr. Ramaswamy about the Emergency Citrus Disease, Research and Extension Program. As you know, in the 2014 farm bill, the intent of the legislation is that research projects funded under this authority should be prioritized based on the critical threat of citrus greening, and to the maximum extent practical, the agencies should adhere to the recommendations of the Citrus Disease Subcommittee. And the farm bill required the establishment of the Citrus Subcommittee within 45 days.

Can you let us know where we are at with that, and then once appointed, what is the timeline moving forward? Once recommendations by that committee have been provided, do you consider those proposals simultaneously, or do you wait until after the proposals have been made?

Dr. RAMASWAMY. Thank you very much, Congressman Rooney, and thank you for your support as well of the overall agricultural research and education enterprise as well.

Very specifically, in response to your question, we are indeed in the process of soliciting nominations. So there is the Citrus Disease Subcommittee that is part of the NAREEE Advisory Board's specialty crops research—or specialty crops committee. That committee, we have already got six members that are from last year, and we are in the process of—we are seeking nominations for three more. And that request was sent out to the community at large last week, and our intent is once the nominations come in to the Secretary, that they will be vetted, and then by the 25th of April, we hope to have that.

By the 1st of May we hope—our staff hopes to have a consultation with that subcommittee and get input on the priorities that are needed. And then our hope is to incorporate that and then release a request for application—as a supplement to the Specialty Crops Research Initiative request for applications that has already gone out. If so, it will come out as a supplement. If everything falls in place, we hope it happens on the 15th of May, and then beyond that, you know, it is a two-step process.

We have to make sure that the work that is to be undertaken is relevant to the industry first. And then once that is done, the proposal will be recommended for a full-blown scientific merit review. That is the second step. And once that is done, the decision is going to be made to make the funding available to the individuals that are involved in research and extension.

Mr. ROONEY. Okay. And as you know, the Citrus Disease Research Program received \$25 million in mandatory funding for Fiscal Year 2014, and this is good news. For our industry there is a considerable amount of ongoing research related to citrus greening that has been supported by this program.

Can you explain how your agency can ensure that the funds are effectively spent in a relatively short period of time while avoiding duplicative research? The reason I ask this is because when I was down in the district, after we got the good news that this was all going to happen, obviously one of the biggest concerns of the growers is, you know, time is of the essence. It is good that we have got this funding, but we are kind of at the moment of truth here with regard to where we go in the future of growing oranges in Florida. So, if you could help reassure that it is going to be as quickly as possible.

Dr. RAMASWAMY. You have my word on it, Congressman.

Mr. ROONEY. Okay. Thank you very much.

With that, Mr. Chairman, I yield back.

Mr. ADERHOLT. Mr. Bishop.

SOUTHEAST POULTRY RESEARCH LABORATORY

Mr. BISHOP. Thank you very much.

Let me welcome all of our panelists this morning and thank you collectively for what you do and what your agencies do to assure that American agriculture is the highest quality, the safest, the most abundant and most economical fruit and fiber anywhere in the world, and it is because of what you do that makes us that way.

I want to go back to the Southeast Poultry Research Laboratory, Ms. Jacobs—Dr. Jacobs-Young. Last year, of course, as was indicated earlier, you proposed to invest \$155 million in the new Southeast Poultry Research Laboratory in Athens, which was the Department's number one priority for the agency last year.

As you may know, I am the cochair of the Congressional Chicken Caucus. Georgia is the number one producer and exporter of poultry products in the Nation, and, of course, the chicken industry as a whole is an integral part of our national economy. And according to the Chicken Council and the U.S. Poultry and Egg Association, the poultry industry directly and indirectly provided over a million jobs, \$47 billion in wages, and \$197.5 billion in economic activity, and \$17.2 billion in government revenue.

The construction of the new lab is critical, because the lab provides solutions to national and international exotic, emerging, and endemic poultry disease problems that impact poultry as well as human health. This year you put the research lab into Opportunity, Growth and Security Initiative, OGS, for a total of \$197 million, which included five additional projects in addition to the SEPRL.

What is the current status of the Southeastern Poultry Lab, how much was obligated for the lab in the current fiscal year 2014, and can you share with us your thinking behind the OGS Initiative? And the final part of that question is in the event that Congress should not choose to fund the OGS Initiative, what will happen to the projects that were included in that OGS Initiative, particularly the research lab in Athens?

Dr. JACOBS-YOUNG. So, Congressman Bishop, thank you for that question, and you are absolutely correct. The poultry lab was our number one priority last fiscal year, and it is our number one priority this fiscal year. And we did not receive funding to begin the project, and so there was no money obligated to modernize that facility.

SEPRL is 33 years old. It has been built with a technology that was very innovative at that time. It is no longer innovative. SEPRL is separated into many different buildings, so the chickens are housed in one building, and we do the laboratory work in another. And so we have duplicative systems to keep the avian influenzas, the BS3—BSL3 laboratories for its containment, so it is very important. We can do energy conservation at the least if we were to consolidate all of our efforts into one building.

There is also a desire to consolidate the Avian Disease and Oncology Laboratory from Michigan into that facility, so we will fortify our work in this very important area and also build critical mass.

We only need to look at the news to see how avian influenza has impacted the global economy, and our scientists have traveled to help our sister countries be able to deal with this very significant issue. If we don't have this modernized facility, and we are one of the world's largest producers of poultry, then I am—I think we lose a step in our ability to be able to respond to issues that could be significant, significant to our industry.

Dr. WOTEKI. I might note also, Mr. Bishop, that this laboratory was indicated as being the highest priority for replacement within the ARS infrastructure. In the report that Congress requested that we develop 2 years ago assessing the research infrastructure and providing a capital investment plan for improving that infrastructure, our assessment is to maintain and improve our laboratory infrastructure within ARS, we will need approximately \$150 million a year. And this particular laboratory, because it is so critical in research on preventing avian influenzas, in understanding them so that we can develop countermeasures for them, because it requires containment to both—to protect our flocks as well as the people that are working with these infectious viruses, that this—this is our highest priority.

We put it in the new initiative that the President has in—called the OGSi because the budget proposal that we brought forward is within the agreement levels, for 2014 and 2015. This high-priority additional research infrastructure and research projects are being highlighted in the budget because, with these investments, we can do more, and we can do it better, and we can do it safely within this kind of new laboratory.

So the whole intent in bringing forward the OGSI is to also demonstrate that for this investment, for agriculture's future, you are going to get a return.

Mr. ADERHOLT. Mr. Valadao.

Mr. VALADAO. Thank you, Mr. Chair.

Doctor—and if I pronounce this incorrect, I apologize—Woteki?

Dr. WOTEKI. Exactly right.

FOUNDATION FOR FOOD AND AGRICULTURE RESEARCH

Mr. VALADAO. Perfect.

The farm bill created the Foundation for Food and Agriculture Research that will match private and nonprofit sectors with public funds. Have you outlined your research priorities for this project yet?

Dr. WOTEKI. Well, we were really pleased, Congressman, that the Foundation for Food and Agriculture Research was authorized in the farm bill because it provides us with a new way of working with partners outside the Federal Government and outside the historic partnership that we have with the land-grant universities.

The legislation itself has a lot of attributes that are very similar to the foundation for the National Institutes of Health, and also a foundation for the Food and Drug Administration, and a number of other similar types of foundations that have been established in recent years. So we have taken the opportunity to meet with the executive directors and the general counsels of those foundations to learn more about how they operate and also to get some advice from them about how to go about establishing this new entity.

Mr. VALADAO. I am sorry, the priorities, is what I was getting at. Just any idea where the research is going to be—the money is going to be spent on what type of research?

Dr. WOTEKI. Well, that is actually going to be coming from the external world.

Mr. VALADAO. Okay.

Dr. WOTEKI. But I think the guideposts are established in the legislation saying that this is work that is supposed to complement the already funded programs that we have.

You know, the ideas are going to be coming from external. They are going to be coming from companies, they are going to be coming from organizations, and they are going to be coming to the foundation and saying, we would like to partner with you and with the Federal partners in USDA in this project, and then the board of directors is going to be deciding whether they are going to take this on or not.

U.S. AGRICULTURE PRODUCTIVITY

Mr. VALADAO. Okay. You mention in your testimony that the U.S. agriculture productivity is now growing more slowly than both China and Brazil, and that you believe it is due to the amount of money both these countries spend on research.

Do you think that our overburdened regulation such as rules treating milk spills like oil spills, obviously the release of personal information of some of the farmers that happened not too long ago, or the changing of the definition of waters of the U.S. without going through Congress were also to blame? Or even things as sim-

ple as the marketplace going towards a more organic-type farm where production is obviously less per acre or per cow. Or whatever type of product. There is a difference in production, but what do you attribute this more to than anything?

Dr. WOTEKI. Yeah. I think that the increase in agricultural productivity that I am referring to is being measured before the marketplace in which the regulation that you are referring to would be implemented. The kind of investment that is made in agricultural science is leading the farmers to new ways, new seeds, new ways of production that are increasing yield per acre, which is the way really that we are measuring that kind of agricultural productivity.

RESEARCH INFORMATION

Mr. VALADAO. Through science, we have seen many breakthroughs in agriculture that improve crop yields, dairy productivity, and feed-to-grain ratios. An ARS initiative outlined in your budget directs 26 million to focus on crop and livestock genetic improvements. However, despite our success moving forward, many still fight the outcomes of the very research to improve feed efficiency, resist pesticides, or weed growth, to name a few.

What ideas would you have to disseminate the information to the public so that the American people can continue to trust our farmers and ranchers to deliver safe and healthy product?

Dr. WOTEKI. Well, I think everybody here with me, the administrators of our agencies, agree with the sentiment in your question that we need better science education in the U.S., and we also need a better part—a bigger part of our curriculum devoted to providing information both through school curricula and through more informal routes of education about where your food comes from.

Mr. VALADAO. Well, one of the things that I see, because I am a dairy farmer myself, and I do farm a little bit of row crops as well, we see a lot of product come out onto the marketplace, and we struggle to get either released or approved by whatever agency would have to do so. And then once it is approved, then you see some of the agencies even come out and not be as supportive publicly as the farmers would appreciate or ask the agencies to be so.

I mean, genetics on cows, obviously that is probably an easy one because you breed just like you do any other animal; you look for superior traits in an animal, and you breed the animal alongside of that. But when it comes in to row crops, if you are looking for certain types of crops to grow that are more drought tolerant, whatever it may be, we do struggle as a farmer getting our word out, and it would be helpful, I guess, if the agencies would help a little bit with the information on how safe these products are and how the consumer shouldn't be concerned and be able to purchase the product. So thank you.

Dr. WOTEKI. Yeah. Well, we also understand that sentiment. We had an opportunity yesterday—it was the 100th anniversary of Norman Borlaug's birth—to hold a symposium in his honor yesterday afternoon. We also participated in the ceremony with the unveiling of his statue in the Rotunda. Mr. Latham was one of the speakers at the program.

But in the afternoon symposium, we had a number of students, high school students, college students, who were speaking, and

they actually were addressing this question as well about how do we provide more information to the public so that there will be that level of trust in their food, and where it comes from, and in the safety of that food.

Mr. VALADAO. Thank you, Mr. Chairman.

Dr. WOTEKI. And they very much were emphasizing the importance of it is for everybody who is involved in agriculture to be conveying that message.

Mr. ADERHOLT. We need to go on with Mr. Fortenberry.

FARM WORKER WAGES

Mr. FORTENBERRY. Thank you, Mr. Chairman.

Good morning, everyone. Good afternoon.

I want to start right away into a question regarding what is called the adverse effect wage rate. I don't know what "adverse effect" means, but, nonetheless, it is adversely affecting us in Nebraska. The adverse effect wage rate is \$13.41, the highest in the country. The reason this is a difficulty—and I will give you a story.

Two small farmers came to see me recently. They are specialty crop farmers, and they use the H-2A visa program for help. They are trying to do this legally, in the right way, and, yet, they are being effectively penalized by this peculiar determination by the Department that the adverse effect wage rate is \$13.41.

Now, right next door in Iowa it is \$12.22. Next door in Minnesota it is \$11.49. In Colorado, it is \$10.89. In California, it is \$11. That means that they cannot compete based upon an artificial statistic that is coming out of the Department in conjunction with the Department of Labor.

So I want to know what is the methodology for this. I want you to know the impacts that this is having. I would like to see this reexamined as quickly as possible because this is not a matter of taking months and months to unpack something that is very deep in the Department.

It is affecting farmers on the ground right now who are trying to do exactly what the Department is asking them to do by developing traditional means of production, creating local food markets, entering into a field of, again, agriculture that has diminished over the years, but now is reemerging. That is exactly what we have been trying to do in agriculture to augment the ag family.

But it seems to me that we are artificially penalizing them by this very high wage rate and creating an unlevel playing field for them. I don't know. I surmise that having North Dakota at the same rate has to do with something that is related to oil field worker salaries.

So that has created an artificial demand in the northern part of this, again, artificial grouping of states, an artificial demand for labor that is completely inconsistent with what the reality is on the ground in Nebraska and in the surrounding states. I mean, even in Oklahoma it is a little over \$10.

So I would like this addressed, please, as to what this is, how it is determined, how we fix this so that it is more fair, but quickly. Because we are undermining one of the Department's goals here by a statistic that is generated through some process that is unfamiliar to me.

Dr. WOTEKI. Well, I had not heard about this particular statistic until very recently. It is derived from a survey that the National Agricultural Statistics Service does called the Farm Labor Survey.

And Dr. Clark could give you a brief overview of the methodology. But, also, if you would like a more in-depth consultation, we would be happy to provide that.

Mr. FORTENBERRY. Well, I would like it fixed. I mean, that is the reality. I don't think this is fair. How we are grouped all the way with, again, oil field workers in Nebraska who—why is this happening?

Again, it is inconsistent with the Department's goals to promote this form of agriculture. And you are penalizing farmers, again, who are trying to do this the right way by using labor through a legal program, and I think it is fundamentally unfair.

Dr. WOTEKI. As I said, sir, we would be happy to provide you with information about the methodology. We understand your concerns.

[The information follows:]

METHODOLOGY OF FARM LABOR SURVEY

NATIONAL AGRICULTURAL STATISTICS SERVICE (NASS)

The Department of Labor (DOL) is responsible for determining the adverse effect wage rates. In order to determine these rates, DOL has a reimbursable agreement with the National Agricultural Statistics Service (NASS). Under the agreement NASS collects data on the number of hired farm workers, average hours worked, and wage rates based on DOL specifications.

The target population for the Farm Labor Survey includes U.S. farms with sales of \$1,000 or more. The survey uses a combined sample size of about 12,000 farms. Survey data is collected for the week in which the 12th of each month occurs in January, April, July, and October. Data is collected through computer-assisted telephone interviews. Personal interviews are reserved for special classes of non-respondents, some large operators, and other special cases.

Mr. FORTENBERRY. Okay. I am questioning the methodology.

Dr. WOTEKI. And we'd be happy to—

Mr. FORTENBERRY. This is a time I have right now.

Dr. WOTEKI. We would be happy to talk it through with you.

Dr. CLARK. I could give you a few details.

The adverse effect wage rate is equal to the highest of three indicators: The prevailing wage rate, the minimum wage rate, and the annual weighted average hourly rate for field and livestock workers that is published by USDA. This is a Department of Labor regulation, and it is for the H-2A.

NASS conducts a semiannual survey that provides data annually at the request of the Department of Labor. This is funded by the Department of Labor. And that is the survey that you are referring to.

And, generally speaking, it might be the highest of those three wage rates; so, it would be used in calculating the adverse effect wage rate.

Mr. FORTENBERRY. What is the minimum wage in California?

Dr. CLARK. I am not sure I could tell you that.

Mr. FARR. \$10. !

Mr. FORTENBERRY. That is about 2½ lower than where I am. So you understand the point here?

Dr. CLARK. Yes.

Mr. FORTENBERRY. We have taken some sort of statistical model and applied it in realtime that is penalizing farmers who are trying to do this the right way and are acting consistently with the intentions of farm programs in the Department.

But I think this has to be reviewed, again, not—with all due respect, Madam Secretary, not in my office with me, but I would like this reviewed now back in the Department to demonstrate—or at least have it reconsidered—how this is inconsistent with the reality of what wage rates are in Nebraska.

Dr. CLARK. We can address the survey. But, as I mentioned, it is not—it is done as a reimbursable survey at the request of the Department of Labor.

So we are affected by the funding that is provided by the Department of Labor to design a survey that has the quality that you are seeking.

We can have a discussion of that, but it has to be in conjunction with the Department of Labor that is funding this survey.

Mr. FORTENBERRY. Okay. That is still not clear to me, what you just said. Is it the Department of Labor's or the Department of Agriculture's responsibility?

Dr. CLARK. We are collecting the data. We are doing it to the specifications that the Department of Labor is providing us and the budget they are providing us. And so, if the data is not at the—

Mr. FORTENBERRY. So you have the input data. You have responsibility for the input of data to determine the outcome that the Department of Labor is using in their survey—or as part of their report?

Dr. CLARK. We are doing the survey in conjunction with them under their specifications.

Mr. FORTENBERRY. Okay. Fine.

We have got a problem here. Okay? Who is going to help me?

Dr. WOTEKI. Mr. Fortenberry, we will certainly look into it, and I will be reporting back to you.

[The information follows:]

DETERMINING AND IMPLEMENTING THE ADVERSE EFFECT WAGE RATE

NATIONAL AGRICULTURAL STATISTICS SERVICE (NASS)

The Department of Labor (DOL) is responsible for determining the adverse effect wage rates. DOL has a reimbursable agreement with NASS to collect data for the Farm Labor Survey based on DOL specifications. DOL's current H-2A regulations state that the Adverse Effect Wage Rate (AEWR) shall be equal to the highest of the following three indicators: (1) The Prevailing Wage Rate, (2) The Minimum Wage Rate, or (3) The annual weighted average hourly wage rate for field and livestock workers (combined) for the region as published by USDA based on its quarterly Farm Labor wage survey.

Mr. FORTENBERRY. Very quickly, please.

Dr. WOTEKI. Very quickly.

Mr. ADERHOLT. Mr. Farr, the Ranking Member, would like to say something.

Mr. FARR. I just happened to get about 3,000 guest workers over the border for these programs and you have to really go through three departments, first of all, the Department of Labor, USDA, and State Department. You might want to bring all three of those departments into your office and see if you can clean it up.

Mr. FORTENBERRY. Thank you.

Mr. ADERHOLT. At this time I would like to recognize Mr. Latham. But before I do, there has been a request for him to sing the Iowa Corn Song.

ANTI-MICROBIAL RESISTANCE

Mr. LATHAM. We did that yesterday in Statuary Hall. Thank you very much, Mr. Chairman. And later in private I will be glad to do that. But welcome.

And, first of all, I am very pleased in the budget that you are not taking money out of the formula funding for places like Iowa State. And I know you are cheering for the Cyclones in the tournament this week, being a former dean there.

But I was very pleased, also, in your testimony you mentioned that a one-dimensional approach that targets meat is inadequate to mitigate the problem of antimicrobial resistance. It is common and popular to blame the resistance solely on livestock production, even though the issue, as we understand it today, is far more complex and nuanced.

Unfortunately, some Federal agencies, such as the Centers for Disease Control and Prevention, sometimes join in that chorus, and some report on resistance threats target livestock production, but make no mention of the overprescription and misuse of antibiotics by humans.

I am curious. How much do you engage with the CDC and other Federal agencies on the issue? What research is USDA conducting on the issue? What has research shown? And can you assure us, I guess, that USDA talks to other agencies to get a more balanced approach as far as what they are saying to the public?

Dr. WOTEKI. Well, Mr. Latham, we do work very closely with the Centers for Disease Control, with the Center for Veterinary Medicine at the Food and Drug Administration and, also, with the National Institutes of Health in a three-pronged approach towards antimicrobial resistance.

We have a role in surveillance and—with APHIS and ARS, both, involved in what is called the NARMS system, the National Antimicrobial Resistance Monitoring System. And it is focused on three pathogens: *E. coli* O157:H7, salmonella and *Campylobacter*.

Our research programs are both conducted by ARS, and NIFA also sponsors research at universities across the country, land-grant universities like Iowa State, and that research program has two focuses.

One is identifying alternatives to the use of antibiotics in livestock rearing, and, secondly, on just fundamental understanding of the ecology of pathogens in livestock-rearing operations, how these resistance genes exist in the environment and are transmitted from the environment to livestock and then through to the consumer.

So that research program has that fundamental emphasis, but, also, the real practical thing of, "What can we be doing to reduce the presence of these organisms in livestock rearing?" And that is where the third prong comes in, and that is outreach and education.

So what we find from these research programs goes through to the extension programs, goes through the veterinary medical edu-

cation and animal science curricula. So it is a three-pronged approach.

And we are active participants with the other Federal agencies in a task force that is focused on antimicrobial resistance. We work with them under the plan that is public, out of this task force, and updated every few years to reflect what we have learned and new directions that we are heading in.

PORCINE DISEASE

Mr. LATHAM. Do you ever—a lot of producers are obviously very concerned that the perception out there is that, by eating meat or whatever, that somehow they are losing resistance. I see I am very short on time here. I talked too much about Iowa State.

But I did want to know what you are doing about the PED virus and that situation. It is a huge issue, obviously, with the devastation—death of up to 5 million pigs so far and what is going on.

Dr. WOTEKI. Well, we share your concerns about the Porcine Epidemic Diarrhea (PED) virus. ARS has had a really active program of research. And I think Dr. Jacobs-Young could fill you in on that.

Dr. JACOBS-YOUNG. So, Congressman Latham, I am sure you are aware that there is no current effective vaccine for PED. So we are working in our animal protection work in ARS to help develop a vaccine for PED.

One of the things that we have recognized is that it is transferred from fecal to oral. That is how it is transferred.

So what we have learned early on is just management practices can also help mitigate some of the spread of the PED. That is washing hands, washing boots, keeping populations separated.

It has the worst impact on pigs from 0 to 3 weeks old. So that is where it can be really devastating. So how can we impart some immunity in some of our older hogs.

And so we are new on this activity. 2013, I believe, is when it first really reared its head. And so we are making some progress on that.

And our work at the National Animal Disease Center (NADC), which I am sure you are very familiar with; over at Clay Center; and here in Beltsville, Maryland—between those three centers, we will get it figured out.

Mr. LATHAM. Thank you very much.

RESEARCH INFORMATION SECURITY

Mr. ADERHOLT. Thank you.

Interesting article in The New York Times last month about the espionage. And, of course, it reports on the growing efforts to steal feed technology by foreign nationals. Obviously hurts American producers, companies, and researchers.

Dr. Woteki, I will address to you. I know the Department of Agriculture is aware of the seriousness of this problem, no doubt.

Can you walk us through some of the things that the Department is doing to protect the secretive and sensitive research information.

Dr. WOTEKI. Most certainly, Mr. Aderholt.

In our research programs, there are really three—three pillars to them. And one is that, to the fullest extent we possibly can, we

want to share our results. And we have this ethic of sharing the research through publication and journals and, more recently, by providing data publicly online.

But the other two pillars are we also respect the privacy issues. So when we enter into research agreements with companies or when the statistical agencies obtain data from farmers, that protection of privacy is very important.

And then the third pillar is the protection of intellectual property where, when we, again, enter into agreements with companies, with sharing of data, we also sign confidentiality agreements with them and we honor those confidentiality agreements.

In that context, the events of intellectual property theft that you were referring to were ones that we found very deeply troubling. We have in the Agricultural Research Service undertaken a review of our procedures that we have in place to make sure that, first of all, everybody is current on their training and has a full understanding of what their roles and responsibilities are and, secondly, to do the kind of internal audit of the way that we are operating to determine, you know, if we are meeting our own standards.

So Dr. Jacobs-Young is new in this job, but she is taking these aspects of protection of intellectual property very seriously.

Mr. ADERHOLT. What protocols are in place to ensure that foreign nationals who work for the Department's research agency are not engaged in espionage?

Dr. WOTEKI. It is very difficult to assure, as you have posed this question, that someone is not engaged in espionage.

What we do do is to make sure that personnel are thoroughly vetted before they are hired into critical positions and, when they are hired, that they are properly trained and understand what our rules and requirements are.

SOUTHEAST POULTRY RESEARCH LABORATORY

Mr. ADERHOLT. Okay. Let me switch over to something Mr. Bishop had inquired about, about the President's Opportunity, Growth, and Security Initiative for the design and build of the poultry science lab in Athens.

Of course, as I mentioned, while we cannot consider the request this year because it exceeds the budget cap for fiscal year 2015, the subcommittee recognizes the need to invest in infrastructure for agricultural research.

What are we looking at as far as the length of time to design and build the facility?

Dr. WOTEKI. I don't have a firm timetable immediately on hand. I am looking to Dr. Jacobs-Young.

Do you know the timetable?

Dr. JACOBS-YOUNG. From design to finish, we are talking 3 to 4 years.

Mr. ADERHOLT. Okay. Do you anticipate costs will rise and additional appropriations are going to be needed in the future? Whoever.

Dr. JACOBS-YOUNG. Cost of inflation. So the cost of inflation is the only thing that I can see from this point. As technology changes—we really can't predict where technology is going to go.

But I assure you we will do our best to stay within the confines of the budget.

Dr. WOTEKI. The one thing that we do know, sir, is that the longer that we delay in beginning this construction, the greater the cost is going to be.

SPECIALTY CROPS

Mr. ADERHOLT. Sure.

What is ARS's strategy for future investments, such as what is needed for specialty crops?

Dr. WOTEKI. With respect to infrastructure, sir?

Mr. ADERHOLT. No. Specialty crops. Well, what is ARS's strategy for future investments when it is needed? I know Mr. Farr has noted this need for years.

Dr. WOTEKI. Well, we have asked our external advisory committee, the NAREEE board, to do a review of our portfolio of research.

One of the recommendations that the President's Council of Advisors on Science and Technology made—or one of the inferences, actually, in their report was that the balance in our research portfolio between the major crops and the specialty crops was not appropriate.

So we have asked NAREEE Board to provide us with some advice, to do a really thorough review of that balance within the portfolio.

We do think that the specialty crops area is one in which, if the budget situation turns around, that there is a great opportunity for increased investment that will be very beneficial for American farmers.

So we are looking to come back to you in a year with a report from our advisory committee about that balance and some recommendations about future directions.

Mr. ADERHOLT. Okay. Mr. Farr.

FLORICULTURE

Mr. FARR. Mr. Chairman, thank you for asking that question. I will just follow up quickly.

The Secretary was in here suggesting that the unfunded balance—the unspent balance every year of the USDA ought to be rolled over into a capital outlay fund and use that fund for funding the projects that you have prioritized.

I appreciate—what the committee asked them to do is to take a look at what the Defense Department does in doing their capital outlay for all the different services. They have a thing called the FYDP, which is a 5-year list, and you get on that based on, you know, priority needs.

So the services—you don't end up just building all Air Force or all Army or whatever it is and they are all on merit and we never have any earmarks. And so it makes the process very fair. And that is what you have done, and I appreciate that.

And now we have to find the money to pay for it. And so that is what the Secretary suggested, that we create a capital outlay fund, because Congress has a hard time appropriating that money

now that we—you know, we have to rob from Peter to pay Paul and nobody wants to give it up.

There are no Peters around. Nobody wants to rob from Peter anymore. Lots of Pauls, but no Peters.

But, anyway, I want to ask something about the bump—well, first of all, the floriculture issue. I have a lot of flower and nursery production in my district, and I was really surprised to see that your budget cuts money from that floriculture nursery research.

That is a research program that is well supported by the industry, leverages a lot of industry funds. When there were earmarks, we put them in there. Congress has supported it.

I am surprised why you would cut almost three-quarters of a million dollars out of the program toward administration priorities.

Why do you pick on this program?

Dr. WOTEKI. Well, each year, Congressman, we go through a prioritizing of projects. I think we have talked in past hearings about the cycles of program reviews that we go through to identify what—

Mr. FARR. Yeah. But why this one? Do you have any specifics?

Dr. WOTEKI. Well, these are judgments of what are lower priority programs. Sometimes those judgments are also based on an assessment of—has the research program largely met its goals.

So for each cycle in our budget, you are going to see this request for appropriation going towards a higher priority and a retiring of areas that are deemed to be lower priorities.

Mr. FARR. In prioritizing that, do you also look at industry match and industry involvement?

Dr. WOTEKI. That is certainly part of the assessment. Yes.

Mr. FARR. I mean, road-building projects, if you don't produce part of the money at the local level, I mean, in California, they won't even consider it. Some counties in California and cities have created a special tax for just that purpose.

But you have—it's a sort of—you go to the first of the line if you are putting up money. And it seems to me that where there is enough interest in the industry to put up private capital to support balanced research, then we ought to prioritize those higher. And it seems like that's here but—

Dr. WOTEKI. And that is also one of the ideas behind this Foundation for Food and Agriculture research that will provide new opportunities for doing that kind of partnering, accepting funds from external organizations to complement research programs—

SUSTAINABLE AG- RES- AND EDUCATION PROGRAM

Mr. FARR. I think that is a great idea, and I hope you will follow through with that.

Let me ask Mr. Ramaswamy about the sustainable agriculture and research, the SARE program.

You know, I think it has a proven track record to delivering farmer-ready research innovations to farmers in the field. And I am pleased that you bumped it up, but it has only got about one-third of its authorized level.

Why aren't we putting more money into it?

Dr. RAMASWAMY. Thank you very much, Mr. Farr, for that question. And, indeed, you are right. The SARE program has done very

well in supporting—or helping to develop sustainable approaches to production agriculture.

And so, as we were developing the budget for 2014, we stayed within the bipartisan agreement and, looking at increasing one place, you had to come up with an offset in some other place.

And so, as you might well imagine, there are a lot of programs that really need—desperately need very significant increases in funding. And so we had to, you know, juggle these numbers across all the different lines.

As you know, we have about 60 different lines that we have within NIFA and we are trying to figure out how best to support all of these different programs. You know, like you, we're supportive of the SARE program as well.

Mr. FARR. Well, I think it goes to the former question, too. I mean, these are all specialty crop issues, and it seems to me that so much of our research, as you have indicated, is tilted and their facilities and everything else have been about traditional—the commodity programs. And we'd like some parity here.

Dr. RAMASWAMY. In addition to the SARE program, of course, we have got the Specialty Crop Research Initiative, the Organic Research and Extension Initiative, and other programs that the individuals that seek support for SARE could apply to those other programs as well. So we have seen an increase in those, including the Agriculture and Food Research Initiative as well.

So, hopefully, you know, we are trying to meet the needs that are out there. Obviously, as you stated in your opening statement, it is not commensurate with the needs that are out there—

Mr. FARR. I would be interested in what you just said about they can apply to the other programs. Would you give us a list of how many of those have been funded from the other programs?

Dr. RAMASWAMY. Yes, sir.

[The information follows:]

SUSTAINABLE AGRICULTURE RESEARCH FUNDING

National Institute of Food and Agriculture is now advancing sustainable agriculture practices as a part of many new programs that did not exist when SARE was the primary funding source for sustainable agriculture research and extension. Many of these programs were created and/or funded through the 2008 and 2014 Farm Bills. These include the Specialty Crop Research Initiative (SCRI), the Organic Agriculture Research and Extension Initiative, the Beginning Farmer and Rancher Development Program (BFRDP), the Agriculture and Food Research Initiative and the Community Food Projects Competitive Grants Program.

In comparing the lists of SARE grant recipients between 2008 and 2013 with the grant recipients from these other programs, we found that eight individuals had received funding from SARE and one of these other programs. In fact, one of the recipients was Dr. Press at University of California, Santa Cruz. In general these recipients had smaller SARE grants first which were followed later with larger grants from the BFRDP or SCRI. The following is the list of grant recipients who received a grant from both SARE and one of the other programs.

- Leigh Adcock, Women, Food and Agriculture Network, SARE and BFRDP;
- Douglas Collins, Washington State University, SARE and BFRDP;
- Sally Miller, Ohio State University, SARE and SCRI;
- Michael Morris, National Center for Appropriate Technology, SARE and BFRDP;
- Daniel Press, University of California, SARE and BFRDP;
- Anusuya Rangarajan, Cornell University, SARE and BFRDP;
- Harald Scherm, University of Georgia, SARE and SCRI; and
- Glenn Teves, University of Hawaii, SARE and BFRDP.

Mr. FARR. I would like to share those with my growers.
Mr. ADERHOLT. Mr. Nunnelee.

ARS LEADERSHIP

Mr. NUNNELEE. Thank you, Mr. Chairman.
I presume I need to ask Dr. Jacobs-Young, unless somebody else could better answer the questions.

The Agricultural Research Service has their five-state mid-south headquarters in Stoneville, Mississippi. Last year, the mid-south director, Dr. Ed King, retired. And I just need to know a timetable on filling that vacancy.

Dr. JACOBS-YOUNG. Thank you for that question, Congressman Nunnelee.

Yes. We definitely miss Dr. Ed King. He was a historical monument in ARS. And so we miss his leadership.

The timetable—we are looking at October 1st where we are going to do a little bit of reshuffling of our senior executives in ARS. And so October 1st we will have a permanent—our plans are to have a permanent senior executive in place.

Currently, we have an acting area director, Dr. Dan Upchurch, who is also—you know, he is great. So he is serving in that position. And Archie Tucker, who is the number two there, has also been there for many, many years. So it is under great leadership.

CHILDHOOD OBESITY

Mr. NUNNELEE. All right. Thank you.

One other question. Last month researchers at the Centers for Disease Control and Prevention published an article that claimed that prevalence of obesity among preschoolers had fallen by 43 percent in the last decade.

Since then, numerous researchers have said that the headlines were simply too good to be true. As a statistician and economist, I hope you can shed some light on the issue.

Dr. BOHMAN. Well, thank you, Mr. Nunnelee.

You are asking about one of these perennial research questions on the changes in obesity, what is causing them, what are links to government programs, such as school nutrition or the Supplemental Nutrition Assistance Program.

And the Economic Research Service has active work in this area. We bring our strength in understanding consumer demand and data. And we have also found some positive results in nutrition trends.

We released a study a couple of months ago that looked at changes in diet using data from the National Center for Health Statistics, the National Health and Nutrition Examination Survey (NHANES survey), over the period of the recent recession, and we find that during that period you see an improvement in diet.

Some attributed this to people eating out less, where we do know that data shows us that the food consumed in restaurants is of higher fat and lower nutritional value, but, also, some evidence that people who read nutrition labels and pay attention to dietary advice have seen improvements in diet over this period.

We have also looked at research on whether SNAP participants have better diets than nonparticipants. We see a mixed result, depending on whether you look at fats or which types of foods.

So I think it is still an open question, but we have seen some positive results, and we see a need to continue investing in research in this area.

Mr. NUNNELEE. Thank you.

I yield back, Mr. Chairman.

Mr. ADERHOLT. Ms. Pingree.

POLLINATOR HEALTH

Ms. PINGREE. Thank you very much, Mr. Chair. Again, thank you for all your input this morning.

I want to talk a little bit about the pollinator research in the Fiscal Year 2015 budget. I think we have all heard a lot about the concerns in American agriculture.

Obviously, there is a huge dependence on honeybees to populate the crops. Some estimates say we are losing 30 percent of our honeybee colonies every year. So, obviously, there is a lot of interest in acting on this and putting in more research on it.

I signed a letter that many of my colleagues signed to the President last month, urging that his budget include increased funding and research for the causes of colony collapse disorder, and I was pleased to see in the President's proposal that the creation of the Innovation Institutes—one of them would receive up to \$5 million to focus on this.

Given that this is a \$20 million impact, in a sense, on the industry, is this enough? Can you talk a little bit about what you are likely to do, should this come through, and sort of your concerns on this issue.

Dr. WOTEKI. Well, we have received numerous letters from Members of Congress over this past year—

Ms. PINGREE. We like our honeybees.

Dr. WOTEKI [continuing]. With an emphasis on doing more on pollinator health.

So this innovation institute is one response that we are proposing. It would be a way to partner with the private sector and, really, to focus research on understanding what are—at least a half dozen different hypotheses about what is causing the decline in honeybees and in pollinators, in general.

And through that—and, again, because these innovation institutes would be public-private partnerships, also focusing on getting the solutions coming out of those insights into the hands of beekeepers and farmers and changing whatever agricultural practices we may have to change in a way that will support pollinators and, also, support pollination and be an economically feasible approach for American agriculture.

We are also partnering with a number of other agencies within USDA and with agencies external to USDA in planning those efforts and in coordinating the research that is already underway in this very important problem area.

So we hope that, through this combined effort of continuing our ongoing activities and then augmenting them with an innovation institute, that that focused level of activity within a defined period

of time is going to provide some real insights and some products and practices that can be adopted to help immediately.

Ms. PINGREE. Just a little follow-up on that. I mean, this is proposed funding, and you said that you are already doing some research. I think a lot of people see this as a crisis in the industry and, obviously, having a huge impact already.

Have you made some strides? I mean, are we getting close? Are there some practices that you are already suggesting? Because it is hard to talk about it in the future when it is so imminent.

Dr. WOTEKI. Dr. Ramaswamy happens to be an entomologist and for my team has been our lead person on this pollinator inter-agency work and activity.

So, Sonny, why don't you just——

Dr. RAMASWAMY. Thank you very much, Congresswoman Pingree.

And, indeed, the U.S. Department of Agriculture is investing quite a bit of resources in addressing honeybee health in general and also looking at other pollinators as well.

And between the Agricultural Research Service and the National Institute of Food and Agriculture, we are investing in the neighborhood of around about \$25 million a year currently in addressing particularly honeybee health. But as I said, you know, bumblebees and other pollinators are being impacted as well.

And, specifically, a couple of examples about things that are going on: We have the community of scientists that are working together, including our extension specialists and the extension educators as well that come together collaboratively to work across the United States in multidisciplinary teams.

They have identified some of the reasons for why we have declines in the population of bees, the honeybee specifically, and these relate to the loss of habitat. These relate to the parasites and pathogens, such as viruses and varroa mites. These relate to the nutritional status of honeybees.

These relate to what we call migration because we are transporting bees long distances. As you might well know, well over half the honeybee hives are used to pollinate almonds like in the month of February, which is when they should be resting.

So there are a lot of factors that go into this. Those have now been identified. And in addition to identifying those, there is work that is going on across the board, whether it is Federal scientists or State-based scientists, coming up with ways of, you know, improving the genetics of the honeybees. There are some really excellent discoveries that have been made in that realm.

Also, for varroa mites, there have been some new ways of controlling them that includes technologies related to biotechnology that is called interference RNA methods, and it, you know, hits the varroa mites. There is also some biopesticides that are in the process of being registered. One of those biopesticides is from hop, you know, the hop plant that goes into flavoring beer.

There are these hop beta acids and that is in the process—again, based on research that the Agricultural Research Service, scientists have undertaken, and that is in the process of being registered currently as a biopesticide.

So we have made a lot of progress and, unfortunately, it is almost like a moving target and we need to continue to invest our intellectual and monetary resources to address that.

Ms. PINGREE. Thank you very much.

Mr. ADERHOLT. Mr. Fortenberry.

Dr. CLARK. Maybe I could add something to that. One of the things that has been missing is an information base. NASS has had a survey of beekeepers where they have been measuring honey production.

But this survey—we have an initiative to include in this survey questions related to colony losses, pests and parasites, management practices, crops pollinated, and locations served, as well as estimates of revenues and expenses, which will help us provide a benchmark to know what is happening and then could be repeated in the future to see if any of the research that is being conducted has an impact.

Ms. PINGREE. So my time is up. But this is a survey you are proposing to do or are in the process of doing it?

Dr. CLARK. It is in the budget. We are proposing \$2 million to expand our current survey of honeybee production.

Mr. ADERHOLT. Mr. Fortenberry.

FARM WORKER WAGES

Mr. FORTENBERRY. Thanks, Mr. Chairman.

I want to return briefly to this adverse effect wage rate issue simply to make my point in a little more conciliatory manner. Since becoming a Member of Congress, one of my key policy concerns is how do we ensure that we have a robust agricultural sector.

And that is a very broad spectrum and production agriculture is at its heart and that is essential, but we have also worked on trying to figure out ways to expand the ag family. And in the farm bill we have had all kinds of new and emerging policies to help small beginning farmers and specialty crop farmers.

So here I stumble upon a circumstance where we are doing exactly the policy outcome and they are being affected by a strange type of statistical problem that is being generated in a cross-jurisdictional manner between the Department of Labor and the Department of Agriculture. This is why I think I am coming across so passionately about this.

I don't want to see them go out of business. And they can't compete based upon this higher wage rate which is being foisted upon them, but is inconsistent with wage rates, I would suggest, all around us where I live. We have a grouping of States here that have disproportionately high adverse effect wage rates. It seems very peculiar, given the other States where minimum wage and prevailing wages are much, much higher.

That is why I am saying please get to the bottom of this quickly. I understand the entangled explanation—or I didn't fully understand the entangled explanation of how this has cross-jurisdictional boundaries, but I am just trying to get to the bottom of how we re-evaluate this quickly before these farmers give it up because they simply cannot compete based upon what is being told to them by the government in a policy that is inconsistent with other policies

across the hall. So that is why I want to push this and make this clear.

Dr. WOTEKI. We understand, sir.

CENTERS FOR AGRICULTURAL EXCELLENCE

Mr. FORTENBERRY. Thank you.

The second issue I wanted to raise briefly is we have a wonderful community college in northeast Nebraska called Northeast Community College. They have written to you asking—with their interest in becoming one of the Centers for Agricultural Excellence.

And I know that is in the farm bill—that is authorized in the farm bill. I would appreciate any consideration you could give them. They have a long agricultural tradition there. I think the initial response from you was that this has not been funded previously.

But do you anticipate these centers developing in the near term?

Dr. WOTEKI. Well, I was in Omaha in January and had the opportunity, actually, to have lunch with the President of Northeast Community College.

Mr. FORTENBERRY. Okay. I am sure he told you what I just told you.

Dr. WOTEKI. Yes. And they have a great concept for the development of agriculture as part of the college curriculum.

At the time that we met, what I was referring to was that there was a provision in the 2008 farm bill for Centers of Excellence. We were unable to use that authority as it had been enacted without an appropriation to go with it.

With the new farm bill, there is additional language that Dr. Ramaswamy and his team—

Mr. FORTENBERRY. He knows a lot about Nebraska.

Dr. WOTEKI [continuing]. Have been thinking through how they are going to implement this new authority.

So, Sonny, you want to talk about your current thinking.

Dr. RAMASWAMY. Right. Thank you very much, Dr. Woteki.

And thank you, Congressman Fortenberry. Good to see you again, sir.

Indeed, within the AFRI program—the Agriculture and Food Research Initiative—we have an opportunity to create these Centers of Excellence. And so we have a team of individuals that is putting together the approach that we are going to take.

And as you likely know, Deputy Secretary Krysta Harden is, you know, helping us look through the Farm Bill and how do we approach these things, and we are putting together as we go forward—and I can't tell you a lot more because we are still developing it.

It could potentially offer an opportunity. I don't know. I mean, in this particular case, I read the letter as well, and I have spoken to a lot of other community colleges as well about, you know, the possibility of engaging them in creating the pipeline of young people that we need to—that needs to come into the agricultural workforce, the scientific disciplines, et cetera.

And as it has been construed in the language in the Farm Bill, it is more about offering funding for research enterprises—research and education enterprises if the community college in Nebraska

partners with the University of Nebraska in Lincoln, Iowa State, and others as a member—as a consortium, as it were. They will be able to participate in this as well.

By themselves, for the land that they have that they would like to utilize in offering education and research sorts of opportunities, in and of itself, I don't know if they will be able to be competitive. So it might be a separate conversation with them and connecting them with Ronnie Green and others.

Mr. FORTENBERRY. Sure. That is an absolutely fair answer because we do an extraordinarily large amount of agricultural research through the university system and we are proud of that.

And I somewhat anticipated that might be a potential outcome here, but I did just want to raise the issue for your awareness.

Thank you very much, Mr. Chair.

Mr. ADERHOLT. As we conclude, I am going to go ahead and recognize Mr. Farr.

CALIFORNIA DROUGHT

Mr. FARR. Thank you very much, Mr. Chairman. I guess these are last questions.

But Governor Brown of California has had an emergency declaration of the drought that exists there. He has asked Congress and the President to declare a national disaster.

I don't think Obama has done that—President Obama has done that yet. But I am sure your department must have been asked what you might do to help mitigate the problem. That is all we are talking about in California, is the drought.

And I wondered if you had any—and we all know the conservation and all that stuff. Is there anything innovative coming out of the department that might be helpful?

And, particularly, agriculture gets a bad rap because of the water they use, and we are pitting the population of California, the urban—I mean, it is the L.A. Basin where all the people live and where all the food they eat is consumed.

But, you know, there are constantly letters to the editor complaining about the lack of best management practices in agriculture. So time is really short. But if you have anything you are working on, I would like to know about it.

Dr. WOTEKI. Well, one of them is a new initiative within the competitive grants program that Dr. Ramaswamy has initiated.

Dr. RAMASWAMY. Thank you very much, Mr. Farr.

Indeed, we have just released—just about a month ago we have released a request for applications in the water area in the Agriculture and Food Research Initiative, and we are proposing to invest \$30 million over the next 5 years. And the intent there is very—

Mr. FARR. 30 million bucks? That is nothing.

Dr. RAMASWAMY. For starters. I mean, we are hoping to continue to make investments, and ARS and other sister agencies within USDA are also making very significant investments—intellectual investments as well as monetary investments in this area.

Mr. FARR. But it seems to me what we are doing mostly in our area is reclamation. And, frankly, the State kind of led that. Feds

were way behind in being able to use, you know, sewage water treated—

Dr. RAMASWAMY. Right. In addition to this particular request for applications, we are also supporting efforts in water reuse and recycling, in genetics and plant breeding, in improving varieties that can be drought-tolerant and salt-tolerant, et cetera.

So there are a number of programs, and we could certainly provide you a list of things that we are supporting and—

Mr. FARR. Well, it might be very helpful just to—maybe in conjunction with the ag department in California and others, to pull together kind of the state-of-the-art knowledge and stuff that we have in all these different areas so at least people who are searching for some innovation can find out where to find it.

It would be helpful for all of us in—you know, with 54 Members of Congress from California who are all asking this question, and it would be—I think it might be helpful.

And there is nothing—without more rain, there is no—nobody wins. You can't build anything fast enough to meet this year. But we certainly will be—I think we are going to get through it just by squeezing every drop out of the system.

Dr. JACOBS-YOUNG. So, Congressman Farr, currently ARS invests a little over \$30 million a year in drought research. And so we are—similar to what Dr. Ramaswamy talked about, we are looking at optimized irrigation systems. "How do we get more crop per drop?" is what the National Program Leader (NAL) told me about.

We are looking at using nontraditional water sources, looking at salinity-tolerant crops and then, most importantly, building predictive systems.

We have a system that is called the evaporative stress index, which is able to predict drought and, so, giving producers an opportunity to make decisions ahead of the drought actually occurring.

And so that system is currently able to produce predictions a couple of weeks ahead of our traditional systems that we currently have in place. And so we are working on more predictive systems for—

Mr. FARR. I don't know if that is as effective as just getting this total use of water. I mean, it has got to be used over and over again. We don't use it enough.

And I think California therein is the answer, is that we are going to develop some more productions out of saltwater. We are going to probably do a lot more inground storage on drawing water off the rivers in peak flow.

We are probably going to build some more off-stream reservoirs, not on-stream. We are not for dams. And I think we can build the infrastructure that can be consistent in low-rain years.

But I think it is that technology in drip irrigation, reclamation, all of that kind of micro stuff, that is really going to be almost mandatory in the industry.

And I think that is where you could really be helpful, showing us the science that you know about how little you can get by on.

Dr. RAMASWAMY. Indeed. And there is a lot of wonderful work that is going on in California, ARS labs as well as the University of California (UC) system as well. And we will get you a—

Mr. FARR. A list.

Dr. RAMASWAMY [continuing]. A composite list of it.
[The information follows:]

Drought Research

Agricultural Research Service (ARS)

Water management is one of four major problem areas being addressed in ARS' National Research Program in Water Availability and Watershed Management. At the national level, ARS is working to develop irrigation scheduling technologies to improve water use efficiency, including the use of sensors and sensor systems to reduce excess water losses during irrigation; improve our knowledge of crop water productivity, in other words, increasing "crop per drop", including the development of more effective remote sensing tools for estimating regional-scale crop water use; develop improved irrigation application methods that increase agricultural water-use efficiency; and develop strategies to improve the productivity of dryland and rain-fed farming systems as an alternative to irrigated agriculture. This nationwide research contributes significantly to drought mitigation in California and elsewhere throughout the United States.

Current ARS water research conducted in California focuses, in general, on reducing agriculture's water footprint, particularly on freshwater resources, and on increasing "crop per drop." One primary research effort currently underway is to develop protocols for the use of "non-traditional waters," including brackish and saline surface and groundwaters, treated municipal wastewaters, and industrial wastewaters, to support agricultural production. As part of this effort, ARS scientists in California are selecting and breeding salt- and toxic-ion tolerant crop cultivars; developing guidelines for irrigation application methods and management and scheduling for degraded and reused waters from a variety of sources; and developing guidelines for water quality criteria models and management practices for irrigation with degraded waters, including salinity assessment, leaching requirements, and toxic elements. Another primary research effort is on the development of more efficient irrigation techniques that reduce irrigation water consumption using technologies like drip and subsurface drip irrigation that reduce evaporative water loss common with spray and canal-based irrigation systems. Because of the associated soil disturbance, subsurface drip irrigation is most appropriate for perennial crops, such as grapes, while drip irrigation is suitable for use with annual plants as well. While more expensive than ditch or spray irrigation, the investment makes particular sense for the variety of high-value specialty crops that represent a significant proportion of California's agricultural production.

ARS water research projects currently being conducted in California are:

- Developing Sustainable Cropping Systems to Improve Water Productivity and Protect Water and Soil Quality in Irrigated Agriculture, Parlier, California;
- Crop Genetic Improvement and Crop Management in Irrigated Areas Affected by Salinity and Toxic Ions, Riverside, California;
- Effects of Agricultural Water Management and Land Use Practices on Regional Water Quality, Riverside, California; and
- Integrated Field Scale Management Systems for Use of Degraded Waters, Riverside, California.

National Institute of Food and Agriculture

Agriculture, across the value chain, is the greatest consumptive user of water resources in the United States and around the world. Perhaps the greatest challenge facing agricultural producers will be adapting water management to an increasingly variable climate, resulting from catastrophic events such as prolonged drought conditions. Adaptation will be extremely difficult, in part, because other demands for water will continue to increase.

NIFA's approach to addressing the issues of for water for agriculture will focus on a better understanding of: 1) the future of supply and demand for water across the agricultural value chain, including the effects of applying non-traditional water (e.g., recycled water) as agricultural irrigation; 2) the increasing effects of climatic variability on water resources by improving drought responsiveness and preparedness; and 3) societal aspects (e.g., population growth, value and water conservation) including national, regional and local policy that affect water availability. NIFA has awarded funds to research institutions in California to address the adaptation of food production systems such as rice and horticulture crops, through improvements of plant varieties tolerant to drought and heat conditions, and best management practices for efficient water usage and water reuse technologies, at the state and national level. As of fiscal year 2013, NIFA has 9 active, competitively-awarded projects in California institutions totaling \$10.6 million focused on drought and water resources.

Active NIFA Projects in California Institutions Addressing Drought

Grantee	Project	Amount	NIFA Program
University of California, Berkeley	STABILITY IN RANGELAND PRODUCTION WITH INCREASED PRECIPITATION VARIABILITY: LINKING FUNCTIONAL DIVERSITY AND NUTRIENT RETENTION	\$499,000	AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI) FOUNDATIONAL: MICROBIAL COMMUNITIES IN SOILS
University of California, Davis	NEXT GENERATION LETTUCE BREEDING: GENES TO GROWERS	\$2,518,477	SPECIALTY CROP RESEARCH INITIATIVE
University of California, Davis	GENOME WIDE ANALYSIS OF DROUGHT AND SALT-TOLERANCE IN WILD AND DOMESTICATED TOMATO SPECIES	\$143,077	AFRI: POST DOCTORAL FELLOWSHIPS
University of California, Davis	CONSERVATION AND DIVERGENCE IN THE COMMON BEAN (PHASEOLUS VULGARIS) GENOME DURING DOMESTICATION ASSESSED BY NEXT-GENERATION SEQUENCING	\$400,000	AFRI FOUNDATIONAL: PLANT BREEDING FOR AGRICULTURAL PRODUCTION
University of California, Davis	TOLERANCE TO WATER STRESS IN TOMATO: GENETICS AND GENOMICS	\$497,411	AFRI FOUNDATIONAL: BIOLOGY OF AGRICULTURAL PLANTS
University of California, Davis	AN OPTIMIZED INTROGRESSION LINE LIBRARY AND TRANSCRIPTOME SEQUENCE OF SOLANUM TUBEROSUM: NOVEL RESOURCES FOR TOMATO BREEDING AND RESEARCH	\$500,000	AFRI FOUNDATIONAL: PLANT BREEDING FOR AGRICULTURAL PRODUCTION

Grantee	Project	Amount	NIFA Program
University of California, Davis	IMPROVING BARLEY AND WHEAT GERMPLASM FOR CHANGING ENVIRONMENTS	\$5,000,000	AFRI: CLIMATE CHANGE
University of California, Riverside	MOLECULAR DISSECTION OF QUIESCENCE MECHANISMS CONFERRED BY THE SUBMERGENCE-1 LOCUS OF RICE UNDER SUBMERGENCE AND DROUGHT	\$500,000	AFRI FOUNDATIONAL: BIOLOGY OF AGRICULTURAL PLANTS
USDA, Agricultural Research Service Pacific West Area	DEVELOPING SUSTAINABLE WATER MANAGEMENT STRATEGIES FOR VINEYARDS	\$562,035	SPECIALTY CROP RESEARCH INITIATIVE

FARM AND RANCH IRRIGATION SURVEY

Dr. CLARK. Could I just add that the National Agricultural Statistics Service, as part of the Census of Agriculture, conducts the Farm and Ranch Irrigation Survey, and we just will complete that data and release it in October of this year, covering the previous year.

This survey is done every 5 years. So we will give you at least the information on what practices are and the changes that have happened between 2013 and the past 5 years.

Mr. FARR. That would only be helpful for us if it was done on California almost by county because it is not—you know, who cares what the national standard is? We only care about our own backyard.

Dr. CLARK. I know we have State data. I don't know if it is at the county level. But it is a survey.

[The information follows:]

FARM AND RANCH IRRIGATION SURVEY

NATIONAL AGRICULTURAL STATISTICS SERVICE (NASS)

NASS estimates it will release the results of the Farm and Ranch Irrigation Survey in November 2014. These results are based on regions or States that have a large enough sample. California is included among those States with a large enough sample to publish by States, but not by county.

FOUNDATION FOR FOOD AND AGRICULTURAL RESEARCH

Mr. ADERHOLT. Thank you.

Well, as we conclude today, thank you for being here.

Let me just ask Dr. Woteki one last thing. You note in your testimony about the 2014 farm bill created the Foundation for Food and Agricultural Research, provided \$200 million in mandatory funding for it, USDA is directed to stand up the foundation.

What is your time frame, expecting that to be operating?

Dr. WOTEKI. Well, we expect the Foundation to be up and operating in mid-summer. The Secretary did a listening session about the farm bill implementation a few weeks ago and, at that point, indicated that was our time line.

Mr. ADERHOLT. Okay. Thank you.

All right. Well, again, thank you each for being here this morning and for your testimony. We look forward to working with you as we progress with the fiscal year 2015 budget. Thank you.

UNITED STATES DEPARTMENT OF AGRICULTURE
 USDA RESEARCH, EDUCATION, AND ECONOMICS MISSION AREA
 QUESTIONS FOR THE RECORD
 HOUSE AGRICULTURE APPROPRIATIONS SUBCOMMITTEE HEARING
 MARCH 26, 2014

QUESTIONS SUBMITTED BY CHAIRMAN ROBERT ADERHOLT

REE Mission Area

Methyl Bromide Transition

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension activities related to methyl bromide transition, including the participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 2014 and 2015.

Response: The Agricultural Research Service (ARS) Methyl Bromide Alternatives National Program encompasses research to determine alternatives to this pesticide.

Selected research highlights for fiscal years 2009-2013 include:

- Developed irradiation quarantine treatment for rice weevil.
- Used tiny radio frequency tags to track fruit flies and study response to attractants, providing better ways to monitor these insects.
- Showed that shelf-life-extending low oxygen packaging of fresh fruits could be combined with irradiation to eliminate quarantine pests.
- Demonstrated new male annihilation technique using a special formulation of attractant and natural-product insecticide for control of a number of fruit fly species.
- Discovered metabolic pathways of fruit flies through a proteomic approach, providing the means to improve sterile insect technique control.
- Developed methods to monitor parasitic wasps that are natural enemies of navel orangeworm, providing better control of this pest that used to be controlled with methyl bromide.
- Showed that under the right conditions, nitric oxide could be an effective replacement for methyl bromide.
- Showed that navel orangeworm was more significant to stored walnuts than previously estimated, facilitating targeted control to replace methyl bromide and protecting an industry worth one billion dollars per year.
- Found that Hessian fly in hay, a pest that can prevent export, is killed by natural drying prior to baling hay for export.
- Identified factors that cause navel orangeworm to damage pistachios, making it possible to protect 225,000 acres of this commodity without fumigation.

- Advanced the use of phosphine for low temperature fumigation of delicate fresh commodities like lettuce by absorbing damaging carbon dioxide.
- Elucidated the biology of two important fruit flies, providing potential strategies for better integrated control.
- Identified cubeb oil as a powerful attractant of redbay Ambrosia beetle, an invasive pest threatening laurels in the U.S., including avocados.
- A combination of sulfur dioxide fumigation and cold treatment as a postharvest alternative to methyl bromide fumigation for controlling spotted wing drosophila (*Drosophila suzukii*) in California-grown table grapes was developed, greatly enhancing the ability of growers to export table grapes and sweet cherries.

Critical use exemptions approved for use of methyl bromide in 2015 are less than 1.5% of the 1991 baseline amount of methyl bromide used. Further research is currently addressing the remaining 2 percent of use, which consists of recalcitrant problems and new problems that have emerged in some cases as alternatives have been implemented. In FY 2013, USDA research was focused on seeking economically viable alternatives for pests and diseases where methyl bromide is still currently needed. This includes addressing the recent loss of methyl iodide (an alternative to methyl bromide) following its removal from the marketplace by the manufacturer (Arysta) in March 2012. The methyl bromide replacement program was combined with programs on crop protection and soil health in FY 2013 in order to leverage the resources of the three programs for more effective solutions. For FY 2014 and FY 2015, research on replacement of methyl bromide will continue to focus on finding alternative methods to provide integrated pest management of key pests and pathogens before storage, development of alternative fumigation and treatment methods, and development of advanced methods for detection of pests in commodities.

ARS base research activity related to methyl bromide transition funding in fiscal year 2009 was \$19,497,000; fiscal year 2010 was \$19,756,000; fiscal year 2011 was \$20,196,000; fiscal year 2012 was \$18,362,000; fiscal year 2013 was \$15,775,000; fiscal year 2014 is estimated at \$16,756,000; and fiscal year 2015 is estimated at \$16,561,00.

The National Institute of Food and Agriculture also supports research on methyl bromide and provided \$3,304,000 in FY 2009, \$3,801,000 in FY 2010, \$2,914,000 in FY 2011, \$2,376,000 in FY 2012, and \$2,397,000 estimated for FY 2013. Estimated funding for FY 2014 and FY 2015 is \$2,448,000 and \$495,000, respectively. Estimates include funding for capacity/formula funds in addition to the Integrated Activities Account - Methyl Bromide Transition (MBT) program. In FY 2014, the MBT program will focus on developing pest management technologies and interventions to replace Methyl Bromide fumigation for industries affected by the international regulatory phase out. The program calls for adaptive, short term pest management solutions and economic analysis of transition costs. Additionally, the program may fund proposals for economic impact analysis of commodities that have already lost the use of Methyl Bromide. In FY 2015, NIFA is not requesting funding for the MBT program. However, alternatives to methyl bromide research may be addressed through a comprehensive integrated pest management strategy funded under the Integrated Activities' Crop Protection/Pest Management (CP/PM) program.

The Economic Research Service (ERS) conducted no research in this area during fiscal years 2009 through 2011. During fiscal year 2012, ERS conducted analysis of the current economic issues of the U.S. Methyl Bromide phaseout and critical use exemptions with funding of \$67,116, and in 2013 analyzed how the methyl bromide phaseout affected California strawberry production with funding of \$16,444. ERS plans no research for fiscal years 2014 and 2015 in this area.

[The information follows:]

	FY 2009 Enacted	FY 2010 Enacted	FY 2011 Enacted	FY 2012 Enacted	FY 2013 Enacted	FY 2014 Estimate	FY 2015 Budget
Methyl Bromide Research	0	0	0	\$67,116	\$16,444	0	0
Total	0	0	0	\$67,116	\$16,444	0	0

ARS and NIFA Funding for Methyl Bromide

Mr. Aderholt: Please update the chart included in the fiscal year 2013 hearing record showing the funding level for ARS's and NIFA's work on methyl bromide for each of the fiscal years 2000 through 2013 and estimated for fiscal year 2014.

Response: The information is provided for the record.

[The information follows:]

	<u>ARS Funding</u>	<u>NIFA Funding</u>
2000 Actual	\$14,855,000	\$2,558,000
2001 Actual	16,681,000	2,944,000
2002 Actual	17,880,000	2,847,000
2003 Actual	18,051,000	3,817,000
2004 Actual	18,046,000	3,385,000
2005 Actual	18,200,000	3,817,000
2006 Actual	18,288,000	3,657,000
2007 Actual	19,081,000	3,785,000
2008 Actual	19,602,000	3,506,000
2009 Actual	19,497,000	3,304,000
2010 Actual	19,756,000	3,801,000
2011 Actual	20,196,000	2,914,000
2012 Actual	18,362,000	2,376,000
2013 Estimate*	15,775,000	2,397,000
2014 Estimate	16,756,000	2,448,000
2015 Estimate	16,561,000	495,000

*FY 2013 is still an estimate for NIFA. FY 2013 reporting is not complete.

Organic Agriculture

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension activities related to organic agriculture, including the participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

ARS conducts research directly addressing the needs of organic producers at 19 ARS locations across the United States. ARS organic research emphasizes whole-system preventive solutions, rather than one-for-one substitution of conventional production materials and practices with organic ones. ARS provides significant information resources through the National Agricultural Library, Alternative Farming Systems Information Center.

Organic research conducted by ARS is under the National Program for Sustainable Agricultural Systems and is guided by a new nationwide research action plan developed using stakeholder input. Over the past year, ARS scientists developed research projects addressing needs outlined in the new action plan. The priorities for research projects are: 1) field research to improve understanding of biological and cultural management practices including yield limiting factors, nutrient and weed management, and integrating cover crop management techniques into organic production systems (grain and vegetable) to control pests and improve organic crop yields; and 2) field studies to implement organic cropping systems into integrated cropping-livestock farming operations that include improving organic forage yield and quality with organic inputs, while improving nutrient retention.

Some organic research studies are conducted on ARS-managed research sites that are certified as organic farms. Other experiments are under way on working organic farms ranging from small family operations to large, corporate acreage. The long-term Farming Systems Project in Beltsville, Maryland, is an organic-focused research project. Among the findings from this project illustrative of ARS organic research are that soil carbon storage and nitrogen fertility can be increased, while impact on climate change can be lower in organic systems using animal manures and cover crops compared to conventional no-tillage systems using conventional fertilizer and cover crops. However, soil erosion and labor requirements are greater and crop yields, on average, are lower in organic than no-tillage systems.

Another project that is an example of ongoing organic research is the Morris, Minnesota, study where ARS researchers are taking measurements of biomass, yields, soil nutrients, microbial biomass and other physical properties at an organic study site. A nine-year evaluation of tillage, rotation, and fertility strategies in organic and traditional systems at this location has shown that reducing tillage for both systems, and increasing crop rotation diversity for conventional systems resulted in soil improvement, particularly from increased microbial biomass carbon, which is an indicator of healthy soil.

As the nationwide ARS Long Term Agroecosystem Research Network (LTAR), moves forward with its organization and priority-setting, experiments supporting organic yields, soil quality, and economic performance are being included. Consistent measurement protocols for the LTAR locations and a LTAR data management system (DMS) are to be developed in the near future.

ARS funding is provided for the record.

[The information follows:]

	<u>Direct</u>	<u>Indirect</u>	<u>Total</u>
2009	\$16,868,000	\$40,030,000	\$56,898,000
2010	\$17,235,000	\$40,951,000	\$58,186,000
2011	\$14,082,000	\$39,554,000	\$53,636,000
2012	\$12,598,000	\$30,728,000	\$43,326,000
2013	\$11,274,000	\$29,156,000	\$40,430,000
2014 Estimate	\$12,528,000	\$31,549,000	\$44,077,000
2015 Estimate	\$12,528,000	\$31,230,000	\$43,758,000

NIFA supports research on organic agriculture; it provided \$19,842,000 in FY 2009, \$25,000,000 in FY 2010, \$23,992,000 in FY 2011, \$24,000,000 in FY 2012; and \$3,690,000 in FY 2013. The Organic Agriculture Research and Extension Initiative (mandatory) was not funded in FY 2013 but was reauthorized in the 2014 Farm Bill, allocating \$20 million per year from FY 2014 to FY 2018. The Organic Agriculture Research and Extension Initiative program in FY 2014 and FY 2015, NIFA plans to continue supporting research, extension and education activities related to organically grown and processed agricultural commodities and their economic impact on producers, processors, and rural communities. For the Organic Transition program, at \$4 million in discretionary funding in FY 2014 and FY 2015, NIFA plans to continue supporting the development and implementation of biologically based pest management practices that mitigate ecological, agronomic and economic risks associated with a transition from conventional to organic agricultural production systems.

During fiscal years 2009 through 2013, the Economic Research Service (ERS), at a cost of approximately \$1.638 million, conducted research on the practices, challenges, production risks, and adoption of organic farming systems in the U.S. Research also examined the implications of structural and policy changes in organic product markets, how organic producers have responded to the changes, and how consumer interests are being reflected in producer decisions. ERS continued to provide statistical reports and analysis on certified organic acreage and livestock, by state and by commodity. ERS also helped the National Agricultural Statistics Service (NASS) develop and launch USDA's first nationwide Census survey of organic producers.

Ongoing research in fiscal year 2014, with cost of \$1.644 million, which will continue in 2015 examines differences in farm production costs of organic and conventional production systems for major agricultural products and estimates the price premiums needed to make organic systems competitive with conventional systems. Research is examining how changes in U.S. organic policy might affect the types and sizes of dairy operations that can be certified to produce organic milk. ERS will examine the structure and profitability of organic grain production using national producer surveys, each including a targeted sample of organic growers. Despite numerous experimental field trials, little information is available about the relative costs and returns of organic grain (corn, wheat, soybeans) production.

ERS plans to publish a report in 2015 that examines the costs and practices, such as physical distancing and product segregation, used by organic and non-genetically engineered (GE) producers to meet consumer

expectations for differentiated product markets for GE and non-GE products. Data collected in the Agricultural Resource Management Survey (ARMS) and other USDA surveys is being used to examine the economic causes and consequences of unintended GE presence risk and the adoption of risk mitigation practices in order to inform the development of mitigation strategies. Several summer internships have been funded to assist with this project. Many new products with non-GE label claims have been introduced into U.S. supermarkets over the last decade and ERS is examining the retail prices for these products as well as the non-GE price premiums in commodity markets.

Since 1997, ERS has been publishing estimates of certified organic acreage and livestock in the United States, by state and by commodity, based on information from a census of U.S. organic certifiers. ERS will assist with the transfer of this project to NASS during 2014 and continuing into 2015. Another ERS project during this time period will examine retail supermarket scanner data to analyze the characteristics of organic consumers and organic price premiums. ERS is also using data from a variety of data sources to report market outlook and trends for various organic commodity sectors.

Sustainable Agriculture

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension activities related to sustainable agriculture, including the participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 2014 and 2015.

Response: Agricultural Research Service (ARS) research contributing to long-term agricultural sustainability is interdisciplinary and focused on systems. The research brings together diverse expertise to understand how different kinds and sizes of farms function, and how changing, or introducing new technology, can affect production, economic, and environmental sustainability.

The ARS program in sustainability is conducting research guided by a new nationwide research action plan that was developed using stakeholder input. Research projects were developed by ARS scientists following research needs set forth in the action plan. Research priority areas under the new research plan include: 1) Agronomic Production Systems; 2) Specialty Crops and Organic Production Systems; 3) Integrated Whole Farm Production Systems; and 4) Integrated Technology and Information to Increase Customer Problem Solving Capacity. The approach that ARS uses for sustainable agriculture research addresses the four goals used to define sustainable agriculture published by the National Research Council: 1) satisfy human, food, feed and fiber needs, and contribute to biofuel needs; 2) sustain the economic viability of agriculture; 3) enhance environmental quality and the resource base; and 4) enhance the quality of life for farmers, farm workers and society as a whole.

The development of practices that meet multiple goals of sustainability have notable impact. An example is analysis of a 27-year tillage and crop sequence study in Iowa that has shown that a corn-soybean rotation was twice as profitable as continuous corn. The results add economic justification for farmers to use crop rotations advocated for soil conservation/environmental sustainability purposes.

Sustainable research by ARS is addressing scales from the farm to regional food systems. ARS researchers in the Northeast developed a collection of geodatabases that provide county-level, five-year production footprints for key indicator crops (corn, potato, small grains, broccoli, cabbage, soybean, alfalfa, and 'other hay') throughout the entire 13-state northeast region. The data is providing crucial inputs to forecasting models designed to analyze current and future food production capacity. The data and analysis methods provide decision-making criteria to improve the access, affordability, and appropriateness of locally-produced food.

ARS research activity related to sustainable agriculture funding in fiscal year 2009 was \$488,640,000; fiscal year 2010 was \$511,129,000; fiscal year 2011 was \$490,090,000; fiscal year 2012 was \$470,223,000; fiscal year 2013 was \$435,185,000; fiscal year 2014 is estimated at \$481,091,000; and fiscal year 2015 is estimated at \$474,087,000. The Economic Research Service (ERS) conducted research during fiscal years 2009 through 2013 to examine the characteristics of commercial and manure nitrogen use by U.S. crop producers, and the scope and methods for promoting more efficient use of nitrogen for crops that reduce greenhouse gasses and air and water pollution.

In fiscal year 2014 ERS published research that analyzed the economic and environmental performance of different policy instruments for achieving a better manure nutrient balance in the Chesapeake Bay watershed and for implementing improved nutrient management on cropland. In years 2014 and 2015 ERS will analyze the performance of different policy instruments for reducing nitrogen delivery to the Gulf of Mexico.

Responding to increased interest in supporting local agriculture and the Know your Farmer, Know your Food initiative, ERS and university cooperators are researching innovative ways that public and private stakeholders are responding to marketing challenges faced by small livestock producers and processors.

In response to a Congressional request ERS is conducting research on the value of honey bees to the U.S. economy in 2014 and 2015 in the following areas: linkages between land management policy and honey bee health, consumer welfare impacts related to pollinator health challenges, feasibility of substitute pollinator technology, and the development of improved risk management products for commercial bee keepers.

During fiscal year 2014 ERS will continue to conduct research examining the extent to which environmental gains associated with conservation and environmental programs respond to external incentives and changes in program design. In fiscal years 2014 and 2015 ERS will also conduct research on the adoption of conservation practices, the role of conservation easements in protecting native sod and other new provisions for protecting native sod. ERS will release in 2014 a report on the extent to which conservation programs induce landowners to adopt practices they would not otherwise have adopted (known as "additionality"). A second set of projects is focused on the role of auctions, bidding, and other forms of economic and informational incentives in influencing farmers' behavioral responses to alternative markets for environmental services.

In fiscal years 2014 and 2015 at a cost of \$156,889 and \$233,062, respectively, ERS will continue studying the potential effects of climate change on productivity, costs, and returns of U.S. livestock production. ERS will also explore potential impacts of climate change on U.S. agricultural production, markets and the environment, focusing on the constraints and opportunities arising from changing patterns of precipitation, projected shifts in water demand, and the implications for irrigated and dryland agricultural production.

[The information follows:]

ERS activities related to Sustainable Agriculture

	FY 2009 Enacted	FY 2010 Enacted	FY 2011 Enacted	FY 2012 Enacted	FY 2013 Enacted	FY 2014 Estimate	FY 2015 Budget
Sustainable Agriculture Research	\$33,269	\$33,948	\$33,948	\$12,837	\$84,815	\$156,889	\$233,062
Total	\$33,269	\$33,948	\$33,948	\$12,837	\$84,815	\$156,889	\$233,062

NIFA supports research on sustainable agriculture and provided \$188,290,000 in FY 2009, \$195,867,000 in FY 2010, \$361,163,000 in FY 2011, \$334,251,000 in FY 2012, and \$325,717,000 in FY 2013 (estimated).

In fiscal years 2014 and 2015, NIFA's sustainable agriculture programs will continue to support systems research and assist farmers and ranchers through projects that address crop and livestock production and marketing, stewardship of soil and other natural resources, economics and quality of life. The program will also support development of technical guides and handbooks and education and training for Cooperative Extension System agents, and other agricultural professionals involved in the education and transfer of technical information concerning sustainable agriculture. The Sustainable Agriculture Research and Education program combining research and extension functions is funded at \$22,667,000 in FY 2014 and FY 2015. Estimated investments for all NIFA programs supporting sustainable agriculture for FY 2014 and FY 2015 are \$352,931,000 and \$349,625,000, respectively.

Wheat Stem Rust/Ugg99

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension activities related to wheat stem rust/Ugg99, including the participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: NIFA supports research on wheat stem rust/Ugg99 and provided \$3,314,000 in FY 2009, \$3,337,000 in FY 2010, \$914,000 in FY 2011, \$1,158,000 in FY 2012, \$1,146,000 in FY 2013, and an estimated investment of greater than \$1,166,000 in FY 2014, and \$1,158,000 in FY 2015. Fiscal year 2014 awards have not been finalized. NIFA expects to provide funds in FY 2014 comparable to FY 2013. Work being carried out under NIFA-funded grants aims to eradicate the threat from wheat stem rust/Ugg99 by deploying effective resistance to the pathogen while maintaining desirable grain yield and quality. An example is the WheatCAP project which features a molecular

markers database that can help accelerate the development of wheat varieties with multiple disease resistance genes and improved grain quality. Improved wheat quality includes factors such as high protein content, falling numbers measures, dough strength and other characteristics important to the milling and baking industry. Improved barley would have low protein with high alpha-amylase activity while maintaining high yield.

While the wheat stem rust pathogen Ug99 has not yet reached the Western Hemisphere, the Agricultural Research Service (ARS) has been proactive in research to protect U.S. wheat and barley production from this devastating pathogen.

Since 2005, ARS has supported screening of the entire USDA, ARS germplasm collection (including wild wheat relatives) and crosses made by breeders in Kenya where the disease is endemic. Work has been in collaboration with the International Maize and Wheat Improvement Center (CIMMYT), the Kenyan Agricultural Research Institute, and the Ethiopian Institute of Agricultural Research. More than 28 U.S. university wheat and barley breeding programs and 12 private sector companies have participated. This screening has yielded new sources of resistance to Ug99 that have been made publically-available to wheat and barley breeders, including the recent 2014 ARS release of four new spring wheat and five new durum wheat germplasm lines with durable resistance incorporated from wild relatives of wheat. The wheat stem rust pathogen genome was sequenced and a sequence analysis comparison of the Ug99 family of strains was conducted. ARS researchers in St. Paul, Minnesota used this information to develop an accurate and sensitive method to distinguish the Ug99 rusts from other rusts, and to distinguish among strains of rust in the Ug99 family. In FY 2013 and FY 2014, the method is being validated by USDA, APHIS and will be provided to collaborators from land grant universities and the National Plant Diagnostic Laboratory Network to monitor for and detect Ug99, should the rust strain enter the United States.

The ARS plan for FY 2014 and FY 2015 follows the current Action Plan of:

1. Cereal stem rust assessment and pathology;
2. Detection and identification;
3. Monitoring and reporting;
4. Germplasm enhancement, gene discovery, and development of molecular markers;
5. Regional variety development, evaluation, and implementation;
6. Disease management; and
7. Communication and outreach.

Funding for ARS research activity related to wheat stem rust/Ug99 is as follows: fiscal year 2009 was \$1,500,000; fiscal year 2010 was \$3,071,000; fiscal year 2011 was \$2,954,000; fiscal year 2012 was \$2,954,000; fiscal year 2013 was \$2,681,000; fiscal year 2014 is estimated at \$3,032,000; and fiscal year 2015 is estimated at \$3,032,000.

ERS conducted no research on this issue for fiscal years 2009 through 2012, and none is planned for fiscal years 2014 and 2015.

Corn Ethanol

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension research related to corn ethanol, including the participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: There are two Agricultural Research Service (ARS) projects which benefit the corn ethanol industry. In one project, ARS research is enabling technologies for the production of new, high-value co-products at corn ethanol plants. In the second project, ARS scientists are leading multiple institutions in the development of genomic tools to assist corn plant breeders.

In FY 2014 and FY 2015, ARS plans to continue present research efforts in developing value-added products to increase the profitability and economic resiliency of ethanol producers, and to improve the genetic performance of corn.

ARS research activity related to corn ethanol funding in fiscal year 2009 was \$2,452,000; fiscal year 2010 was \$1,961,000; fiscal year 2011 was \$1,244,000; fiscal year 2012 was \$1,244,000; fiscal year 2013 was \$1,148,000; fiscal year 2014 is estimated at \$1,168,000; and fiscal year 2015 is estimated at \$1,168,000.

NIFA supports research on corn ethanol and provided \$151,000 in FY 2009, \$332,000 in FY 2010, \$531,000 in FY 2011, and \$1,086,000 in FY 2012. The FY 2013 data will be available when final funding reports are completed. Corn ethanol could be supported in FYs 2014 or FY 2015 with programs such as formula funds or the AFRI Foundation Program in Economics. Additionally, development of co-products from corn ethanol production might be supported through the mandatory Biomass Research and Development Initiative (BRDI) if a proposal was deemed meritorious by a peer review panel. The BRDI program is funded at \$3 million in 2014 and 2015.

The Economic Research Service (ERS) conducted research during fiscal years 2009 through 2013 to evaluate the impact of an array of policy measures that influence the magnitude, source, and composition of U.S. biofuel corn ethanol production, ethanol imports and exports. ERS also conducted research on the land allocation implications of expanding corn ethanol production in the United States and sugar-cane ethanol in Brazil, and quantified these effects at the global level for 2015.

ERS research addressed how crop and livestock sectors respond to increased demand for corn ethanol and the implications of these regional adjustments on input use, water quality, and soil erosion. Research on the influence of rising commodity prices on the Conservation Reserve Program (CRP) examined the impacts on the composition and environmental attributes of CRP acreage from price changes due to increasing biofuels production. ERS also conducted an analysis of the effects of increased biofuels use on the U.S. economy in the year 2022, focusing on how the mix of policies and energy price assumptions affect economic welfare. Other studies examined the role of Renewable Identification Numbers (RINs) in ensuring compliance with renewable fuels standards, the supply and use of distillers' grains, implications of expanded ethanol production on cropping practices and land

use, and global investment in the biofuels industry. Another 2013 study examined factors that may explain the relatively high prices of RINS in 2013.

During fiscal years 2014 and 2015 at a cost of \$563,625 and \$569,261, respectively, ERS will continue to examine how corn ethanol production and trade affects U.S. and global crop and livestock markets, focusing on the role of policy and international biofuel trade in determining market outcomes and the long-term relationships between energy and agricultural markets. ERS will continue to explore how policy and market factors affect prices for Renewable Identification Numbers (RINS), as well as the economic relationships between energy and agricultural markets in order to improve and enhance routine market outlook and forecasting activities for the major agricultural commodities.

[The information follows:]

ERS activities related to Corn Ethanol

	FY 2009 Enacted	FY 2010 Enacted	FY 2011 Enacted	FY 2012 Enacted	FY 2013 Enacted	FY 2014 Estimate	FY 2015 Budget
Corn Ethanol Research	\$744,240	\$759,429	\$759,429	\$559,429	\$559,429	\$563,625	\$569,261
Total	\$744,240	\$759,429	\$759,429	\$559,429	\$559,429	\$563,625	\$569,261

Human Nutrition

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension activities related to human nutrition, including the participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: USDA's Agricultural Research Service (ARS) conducts research at six human nutrition centers, the first of which was established more than 110 years ago. Funding increases provided in FY 2014 were used to strategically invest in some of the priority areas where we have strength and there is a public health need. The evaluation of ARS computer capabilities for food composition and national dietary survey databases is in progress. Work is being conducted to determine the technical requirements of a new and expanded system. In addition, a public-private partnership has been developed for the purpose of obtaining food composition data on brand name products from many of the largest food processors in the country. These data will be incorporated into our food composition database that is used by researchers, health professionals, and consumers. All interested parties have signed commitments to participate and are providing funding, personnel time, and/or data. A test batch of food composition information will be placed into the system this year to establish proof-of-concept, quality assurance methods and to determine primary requirements/obstacles. As soon as the new system is functional, nutritional information of branded food products will flow directly from the manufacturer to the USDA database. This will allow greater flexibility to link food and nutrient intake with health outcomes, improving quality of research and resulting federal dietary guidance. In future years, beginning in FY 2015, we will enhance the functionality of the food composition database to enable tracking over time, differentiation by brand

name of foods, and by nutrients of concern to public health, particularly sodium and added sugars, which FDA plans to require on revised food labels.

ARS research activity related to human nutrition in fiscal year 2009 was \$85,309,000; fiscal year 2010 was \$89,734,000; fiscal year 2011 was \$85,440,000; fiscal year 2012 was \$85,438,000; fiscal year 2013 was \$80,328,000; fiscal year 2014 is estimated at \$86,328,000; and fiscal year 2015 is estimated at \$88,627,000.

NIFA supports research on human nutrition; and provided \$115,597,000 in FY 2009, \$123,914,000 in FY 2010, \$158,423,000 in FY 2011; \$121,976,000 in FY 2012; \$114,219,000 estimated in FY 2013, and \$99,070,000 estimated in FY 2014 and FY 2015 to support this effort. Projects will focus on children and youth ages 2-19, to identify the behavioral factors that influence childhood obesity; develop valid behavioral and environmental instruments that measure progress in obesity prevention efforts; and fund nutrition research to develop and evaluate effective programs to prevent obesity. Funding will support research and outreach efforts to develop and increase consumption of healthy foods that are low in energy (fats and sugars) and salt, and high in nutrient density and that are appealing (to children).

During fiscal years 2009 through 2013, the Economic Research Service (ERS) conducted research on the economic, regulatory, programmatic, and market forces influencing consumer food choices and the effect of these choices on nutritional, obesity, and health outcomes. In 2014 and 2015, ERS is allocating resources to nutrition research in the following areas:

- Economic analyses and anticipatory research on food policy issues impacting food choice and human nutrition.
- To better understand the complex determinants of food choices, ERS supported its research program with investments in data on food purchases, food program participation, food prices, nutrition knowledge, and consumer psychology.
- Extramural research, drawing upon the multidisciplinary expertise of outside researchers and the resources of numerous institutions and universities across the country, focusing on: (1) the impact of nutrition on health outcomes, (2) an international comparison of food purchase behavior, consumption, and nutrition, and (3) the differentials in price sensitivity, nutritional preferences, and real access across the socioeconomic spectrum.

During fiscal years 2014 and 2015 at a cost of \$15,952,000 and \$16,457,000, respectively, ERS plans to continue ongoing research in these high-priority areas, including analysis of how Federal support for nutrition research has changed (1985-2009) in terms of quantity of projects supported and research questions addressed, how food choices and health outcomes are related to USDA food assistance programs and community characteristics, retail prices and consumer demand for fruits and vegetables, and analysis of the prices of healthful foods.

Concerns about the link between eating food away from home and diet quality were behind the mandate in the Affordable Care Act that restaurant and fast-food chains with more than 20 locations offer nutrition information on their menus. While nutrition information has been available for food at home products since the 1990s, the same is not true for food away from home. The idea behind this provision in the law—which still awaits implementation--

is that more information would help people make better choices at food away from home establishments. In order to establish a context for research into the effects of this provision, ERS research will examine the use of nutrition information at fast-food/pizza places and full-service restaurants before its implementation.

Initial data from the Food Acquisition and Purchase Survey (FoodAPS) was delivered to ERS in fiscal year 2014. The survey provides valuable data and information that will be used for years in the future to examine issues related to food policy and program operations. Results of analyses will begin to be published beginning by the end of calendar year 2014.

[The information follows:]

ERS activities related to Human Nutrition

	FY 2009 Enacted	FY 2010 Enacted	2011 Enacted	FY 2012 Enacted	FY 2013 Enacted	FY 2014 Estimate	FY 2015 Budget
Extramural research (FANRP + RIDGE)	\$4,408,000	\$4,408,000	\$4,408,000	\$3,408,000	\$3,408,000	\$4,408,000	\$4,808,000
Intramural Human Nutrition Research	7,567,000	7,966,000	7,966,000	8,481,000	8,481,000	8,559,000	8,664,000
Data on food prices, purchases, and consumption	3,500,000	3,500,000	3,500,000	2,985,000	2,985,000	2,985,000	2,985,000
Total	15,475,000	15,874,000	15,874,000	14,874,000	14,874,000	15,952,000	16,457,000

Food Safety

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension activities related to food safety, including participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: USDA's Agricultural Research Service (ARS) continues to conduct food safety research that covers various foodborne pathogens and foodborne contaminants, including chemicals, parasites, and toxins.

Consumption of contaminated shell eggs is responsible for major outbreaks of foodborne illness. Currently, only about 1 percent of eggs are pasteurized (by heat) because the process is costly and damages the egg white appearance. In FY 2013, the ARS research laboratory at Wyndmoor, PA, developed a new innovative intervention process using radio frequency (RF) energy that eliminates 99.999 percent of Salmonella that may be present in eggs. The RF process is significantly faster than the current pasteurization process, by more than 50 percent, and the egg whites look perfect. In addition, research ongoing in Athens, GA, at the Richard B. Russell Research Center is concentrating on food safety of poultry and eggs. There are a number of projects that work on poultry food safety from the egg through the processing phase.

There is ongoing food safety research at a number of other locations including Clay Center, NE; College Station, TX; Ames, IA; and Albany, CA. The various locations perform research on all of the major food producing animals including beef, dairy cattle and swine, in addition to poultry.

In FY 2014 and 2015, ARS research will address the following food safety priorities: (1) developing detection and characterization technologies that allow for and enhance inspection, research, and defense capabilities; and developing and implementing new analytical technologies for chemical contaminants; (2) developing and implementing a new data analysis tool to analyze the kinetic data of microbial growth and inactivation frequently found in predictive microbiology. This will allow predictions of how pathogens and spoilage bacteria behave within a food system before and after interventions, information that can be directly used by regulatory agencies and industry; (3) undertaking genomic studies to understand the basic genetic components of pathogens and their expression. This information will be related to the microorganism's biology, to determine for example, what makes a pathogen virulent, or prefer a specific food source or location, or how does resistance develop, persist, or transfer; (4) pursuing alternatives for antibiotic usage in animals including vaccine development for foodborne pathogens, management practices and novel molecules. This will enable control of foodborne pathogens while reducing the amount of antibiotics administered to food producing animals; and (5) performing basic research to better understand the virulence and transmission of foodborne pathogens. This will allow the development of intervention strategies to reduce the level of foodborne pathogens and improve public health.

ARS research activity related to food safety funding in fiscal year 2009 was \$105,695,000; fiscal year 2010 was \$107,597,000; fiscal year 2011 was \$106,789,000; fiscal year 2012 was \$106,210,000; fiscal year 2013 was \$97,962,000; fiscal year 2014 is estimated at \$111,701,000; and fiscal year 2015 is estimated at \$109,902,000.

NIFA supports research on food safety and provided \$27,071,000 in FY 2009, \$43,096,000 in FY 2010, \$35,510,000 in FY 2011, \$21,668,000 in FY 2012; and \$20,993,000 in FY 2013. In fiscal years 2014 and 2015, AFRI funds will be used to improve the safety of the U.S. food supply through new and improved rapid detection methods, pre- and post-harvest epidemiological studies, and improved food harvesting and processing technologies. Within AFRI, about \$22.8 million is estimated to support the food safety challenge area in FY 2014, and about \$25.8 million is proposed for FY 2015. In FY 2015, NIFA also proposes to create a new Innovation Institute on Antimicrobial Resistance (AMR). The AMR Institute, funded at \$25 million, will address AMR through a systems approach from the farm and farm environment to the consumer. This systems approach will engage public-private partnerships inclusive of trans-disciplinary teams of research, education, and extension/outreach personnel, animal scientists, veterinarians, microbiologists, entomologists, soil scientists, social and behavioral scientists, engineers, and health-related practitioners – the latter typically excluded from agricultural and complex AMR research related work at the ecosystem level. Work will include anthropogenic impacts unrelated to antimicrobial use within the antimicrobial resistance research, education, and extension program, including, for example the uptake, fate, and transport of antimicrobials in food crops and subsequent ingestion by animal or human-broadly, the ecology of antimicrobials.

During fiscal years 2014 and 2015 at a cost of \$1,676,000 and \$1,684,000, respectively, ERS plans to continue and expand research in a number of food safety topics, including the expected impacts of new food safety legislation on the farm and food sector; consumer response to food safety outbreaks in fresh produce and other products; measurement of consumer benefits from food safety policy; the costs and benefits of mandatory food safety programs implemented by produce grower organizations; the economic trade-offs for reducing sub-therapeutic antibiotic use in farm animals; and inter-agency collaborations to better understand and prioritize food safety risks and interventions.

[The information follows:]

ERS activities related to Food Safety

	FY 2009 Enacted	FY 2010 Enacted	FY 2011 Enacted	FY 2012 Enacted	FY 2013 Enacted	FY 2014 Estimate	FY 2015 Budget
Food Safety research	\$1,063,000	\$1,272,000	\$1,375,000	\$1,420,000	\$1,345,000	\$1,426,000	\$1,434,000
Cooperative agreements	187,000	198,000	95,000	0	75,000	250,000	250,000
Total	\$1,250,000	\$1,470,000	\$1,470,000	\$1,420,000	\$1,420,000	\$1,676,000	\$1,684,000

Integrated Pest Management

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension activities related to integrated pest management, including participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: In support of the Department's Integrated Pest Management (IPM) goals, the Agricultural Research Service (ARS) currently conducts more than 54 IPM research projects at 31 locations. The projects are focused on minimizing pesticide inputs through the development of classical and augmentation biological control, cultural control, host-plant resistance, behavior modifying chemicals (e.g., pheromone mating disruptors and attracticides), sterile insect release techniques, resistance management, cultural and mechanical practices, improved pesticide application technologies, and the development of new 'natural' pesticides derived from biological sources. Fundamental IPM research provides biological information essential for establishing integrated, environmentally rational pest management in agriculture. Successful results can double the production of crops and save billions of dollars per year for the livestock industry. Target pests include insects, mites, ticks, plant pathogens, nematodes, and weeds. Area-wide projects completed in FY 2013 made significant contributions to thwart colony collapse disorder in honey bees and in the control of key pests of almonds, quarantine pests, and the Asian tiger mosquito. In FY 2013, Area-wide funds were used to enhance large-scale biological control projects on invasive pests from Latin America and Europe, as well as intensify research toward solving colony collapse disorder and the coffee berry borer outbreak in Hawaii. In FY 2014, a competitive process within ARS was initiated to provide a single year of funding to new Area-wide projects.

In FY 2014 and 2015, ARS plans to focus on furthering the development of IPM programs for key invasive insects, including the coffee berry borer, brown marmorated stink bug, spotted wing drosophila, European grapevine moth, Asian longhorned beetle, emerald ash borer, Asian tiger mosquito, cattle fever tick, biting midges, bed bugs, fire ants, Argentine ant, crazy ant, sand flies, Lyme disease tick, corn rootworm, soybean aphid, kudzu bug, and varroa mite. IPM programs will also be developed for plant pathogens such as those that cause citrus greening, Pierce's disease in wine grapes, wheat rust Ug99, boxwood blight, wheat scab, sudden oak death, and laurel wilt. Weed research will develop novel weed management solutions, such as crop rotations that suppress weeds and the development of bio-herbicides from bacteria and plant extracts. These strategies can provide long-term sustainability when used as components of IPM or as standalones. ARS will also continue overseas exploration for natural enemies of invasive pests, including weeds, with a new initiative to focus on those pests that have a direct impact on the pest management of other pests (e.g., some aquatic weeds affect mosquito control efforts). In FY 2014, ARS will also start a Veterinary Pests Genomics Initiative that studies how to use big data from genomics and remote sensing to manage undesirable genetic shifts of invasive species. In FY 2015, ARS will add a climate change objective to all of its veterinary entomology projects.

ARS research activities related to integrated pest management funding in fiscal year 2009 was \$42,508,000; fiscal year 2010 was \$44,184,000; fiscal year 2011 was \$43,656,000; fiscal year 2012 was \$42,899,000; fiscal year 2013

was \$38,114,000; fiscal year 2014 is estimated at \$39,790,000; and fiscal year 2015 is estimated at \$34,544,000.

NIFA supports research on integrated pest management and provided \$29,294,000 in FY 2009, \$29,527,000 in FY 2010, \$22,064,000 in FY 2011 and \$68,574,000 in 2012 and \$16,286,000 in FY 2013. It expects to provide \$18,406,000 in FY 2014 and \$17,728,000 in FY 2015. Examples of the types of recipients of funding for Integrated Pest Management include land-grant institutions and public and private universities and colleges.

NIFA funds programs and projects which support research, education, and extension activities that promote pest management in general, and reduced risk pest management in particular. The agency's pest management programs are implemented through working partnerships with scientists in our nation's colleges and universities, other federal agencies and the private sector.

The Economic Research Service (ERS) conducted research during fiscal years 2009 through 2012 to examine the determinants and value to U.S. soybean producers in managing Asian soybean rust outbreaks. In 2012, ERS updated the Agricultural Resources Management Survey (ARMS) web tool on the ERS website to include corn pesticide use and pest management practices from the 2010 ARMS. In fiscal years 2014 and 2015 at a cost of \$103,516 and \$104,551, respectively, ERS plans to examine trends in the use of weed-management practices used in corn and soybean, the impacts of glyphosate resistance on net returns and production costs for corn and soybean and impacts on long-run net returns to corn and soybean production of using weed-management practices that can delay glyphosate resistance.

[The information follows:]

ERS activities related to Integrated Pest Management

	FY 2009 Enacted	FY 2010 Enacted	FY 2011 Enacted	FY 2012 Enacted	FY 2013 Enacted	FY 2014 Estimate	FY 2015 Budget
Integrated Pest Management	\$13,308	\$13,579	\$13,579	\$132,328	\$102,745	\$103,516	\$104,551

IR-4

Mr. Aderholt: Please update the summary provided in the fiscal year 2012 hearing record regarding all USDA activities related to IR-4, including participating agencies, funding, outside financial assistance provided, the number of registrations completed, and any backlog of registrations, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: In fiscal year 2009, ARS and university scientists working with the IR-4 program analyzed hundreds of pesticide/crop combinations and generated data for use for 105 crops and 52 pesticides.

In fiscal year 2010, ARS scientists established 137 pesticide/crop combinations at field locations in seven states (Arizona, California, Georgia, Ohio, South Carolina, Texas, and Washington).

In fiscal year 2011, ARS researchers established 91 pesticide/food crop combinations in the field for treatment with pesticides and analyzed 52 pesticide/crop combinations in the laboratory for pesticide residues on treated crops.

In fiscal year 2012, ARS continued all efforts underway in fiscal year 2011 including 96 pesticide trials on crops (one trial = one pesticide applied to one crop), 157 pesticide trials on ornamentals, and 110 residue trials.

In fiscal year 2013, ARS researchers established 112 pesticide/food crop combinations in the field for treatment with pesticides and analyzed 69 pesticide/crop combinations in the laboratory for pesticide residues on treated crops.

In fiscal year 2014 and 2015, ARS will continue to conduct research to facilitate registrations of pest management products for specialty food crops and minor uses on major crops, as well as develop efficacy and phytotoxicity data to increase the number of ornamental crops or pests on pesticide labels; with emphasis on reduced risk chemicals.

ARS research activity related to IR-4 funding in fiscal year 2009 was \$3,915,000; fiscal year 2010 was \$3,979,000; fiscal year 2011 was \$3,971,000; fiscal year 2012 was \$3,789,000; fiscal year 2013 was \$3,171,000; fiscal year 2014 is estimated at \$3,171,000; and fiscal year 2015 is estimated at \$2,835,000.

The National Institute of Food and Agriculture, or NIFA, supported competitive grant funding for the IR-4 project and provided \$11.2 million in FY 2009, \$11.3 million in FY 2010, \$11.3 million in FY 2011, \$11.1 million in FY 2012 and \$10.2 million in FY 2013.

In FY 2014, NIFA will provide funding for an IR-4 project headquarters and four geographically-based regional IR-4 centers. Projects will focus on three core objectives: 1) obtaining regulatory clearances of effective crop protection agents for specialty food crops and minor uses on major food crops; 2) research to enhance the development and registration of bio-pesticides for use in food and non-food pest management programs; and 3) research on crop protection products that will expand their uses on ornamental crops, including nursery, floral, and turf. Program investments will be guided by a priority-setting process that engages commodity producers, state and Federal research scientists, and cooperative extension specialists.

The President's budget request for FY 2015 proposes continued support for the IR-4 project. The requested funding will support and enhance the capacity of the IR-4 program to assist growers in obtaining pesticide registrations for specialty food crops and minor uses on major crops, particularly in light of the continued loss of effective pesticides and methods of pest control. The program will invest in research needed for the registration of pesticides that are lower risk but effective and economical, and will increase support for biopesticides, organic production systems, public health, and global initiatives to harmonize Maximum Residue Levels.

ERS conducted no research in this area in fiscal years 2009 through 2013, and none is planned for fiscal years 2014 and 2015.

Colony Collapse Disorder

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension activities related to Colony Collapse Disorder, including participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: In collaboration with Pennsylvania State University, National Program Leaders from the USDA and the Environmental Protection Agency (EPA) convened a National Stakeholder Conference on Honey Bee Health in October 2012, which, for the first time, brought together beekeepers, growers, scientists, chemical companies, non-profit organizations, and government administrators committed to sustaining the industry of managed bees in the United States. The honey bee (*Apis mellifera*) is the main commercial (and a versatile) pollinator. In the United States, the honey bee pollinates crops with an added value in the billions of dollars. The purpose was two-fold: to hear from leading experts in apicultural research and extension on the status of knowledge of the key factors that are associated with Colony Collapse Disorder (CCD) and honey bee declines and to work toward developing best management practices to combat these problems. Program Leaders at USDA and EPA produced a conference report that summarizes the key findings and recommendations from the meeting. The report was released to the public in May 2013.

Responding to requests from beekeeper organizations and growers, USDA and EPA co-hosted a "Varroa Summit" on February 18-19, 2014, in Riverdale, Maryland. The meeting brought together bee and pest control researchers from the government, academia, non-governmental organizations (NGOs), and industry to identify Varroa mite research priorities and the means to organize research program, and leverage resources to meet these priorities. Varroa mites are a major cause of colony losses because they parasitize bees and spread viruses in the colony. A report is expected to be released in late summer 2014.

The CCD and Bee Health Steering Committee is synthesizing the information from the National Stakeholder Conference and report, and the "Varroa Summit" and recent research and extension accomplishments, to develop a revised CCD and Bee Health Action Plan that will outline high priority goals to address CCD and other factors impacting honey bee health.

In response to stakeholder needs, a "Forage and Nutrition Summit" is being considered for late 2014. Next to Varroa mite, lack of forage is considered the leading cause of bee mortality.

Examples of USDA-Agricultural Research Service (ARS) accomplishments for fiscal years 2009 through 2013 include:

- In 2013, ARS bee researchers in Tucson, Arizona, devised a treatment schedule to control Varroa based on colony and Varroa population dynamics. Their findings have led to changes in recommendations for Varroa control to include a late fall treatment so that mite populations remain low over the winter and bee colonies will not be lost in the spring.

- When flowering plants are unavailable, beekeepers feed colonies high fructose corn syrup (HFCS). In 2013, ARS researchers in Tucson, Arizona, found significantly larger adult bee populations in colonies fed sucrose syrup compared with those fed HFCS. This finding complements earlier studies showing shorter life spans in worker bees fed HFCS compared with sucrose. For commercial beekeepers, feeding HFCS instead of sucrose may reduce colony populations and leave them more vulnerable to loss from environmental fluctuations, parasites and pathogens.
- ARS researchers in Tucson, Arizona, worked with Haas Inc. to commercialize a new mite control product, the beta acid-based miticide HopGuard, which received a 2012 Federal Laboratory Consortium Award for excellence in Technology Transfer.
- ARS researchers in Baton Rouge, Louisiana, developed new Varroa resistant lines of bees (VSH and Russian) that are commercialized and widely used. The VSH line received a 2012 Federal Laboratory Consortium Award for Excellence in Technology Transfer. *Varroa* is the number one pest of honey bees.
- ARS researchers in Fort Pierce, Florida, protected bees from viral infection in the first successful field demonstration of RNAi technology that determined targets based on viral sequence information, and worked from a CRADA with Beeologics, Inc. (now with Monsanto). Similar approaches are being investigated for control of bee mites and *Nosema* disease.
- ARS researchers in Beltsville, Maryland, sequenced the Varroa mite, revealing immune proteins that will be targeted in future strategies, e.g., ones dependent on RNAi gene silencing.
- ARS researchers in Beltsville, Maryland, published the genome of *Nosema*, a fungal gut parasite of adult bees that should open new control options for this pathogen.
- Working with USDA-APHIS, ARS researchers in Beltsville, Maryland, completed a nationwide survey of bee health that sets baseline values for pests and diseases prevalence in the U.S. and can be used to regulate international trade in bees and bee products.

In 2014 and 2015, ARS research will focus on developing Varroa control agents, resistant bee lines, diets to improve bee nutrition, *Nosema ceranae* (parasitic fungi) control products and epidemiology, and bee management techniques. Other issues of concern, which can be severe, are American foulbrood disease and the small hive beetle (SHB), which attacks honey bee colonies and destroys bee products. Research will be conducted to determine which management practices are working best to sustain honey bees and their hives. In addition, ARS scientists will conduct research to understand the sub-lethal effects of pesticides on both individual bees and on the colony as a whole. For example, can exposure to pesticides lower honey bees' resistance to pests and pathogens and if/how these effects correlate with or contribute to bee health problems and CCD? ARS research has shown that a number of factors are associated with CCD – including parasites, pathogens, poor nutrition, pesticides, bee management practices, habitat fragmentation, and agricultural practices – no single factor or pattern of factors definitively leads to CCD. ARS will research the inter-relationships of these factors to increase understanding and develop effective prevention and mitigation strategies. In 2015, additional funding is requested in the Pollinator Health and Colony Collapse Disorder initiative to support Colony Collapse Disorder research.

ARS research activity related to Colony Collapse Disorder funding in fiscal year 2009 was \$8,290,000; fiscal year 2010 was \$10,000,000; fiscal year 2011 was \$9,980,000; fiscal year 2012 was \$10,128,000; fiscal year 2013 was \$9,353,000; fiscal year 2014 is estimated at \$10,217,000; and 2015 is estimated at \$14,017,000.

NIFA supported research and extension efforts on Colony Collapse Disorder (CCD), Honey Bee Health, and other agriculturally-important pollinators with the following investments over the past five fiscal years: \$2,877,000 in FY 2009, \$2,916,000 in FY 2010, \$4,677,000 in FY 2011, \$4,667,000 in FY 2012, and approximately \$11.5 million in FY 2013. We estimate that the agency will invest an additional \$15.3 million in FY 2014 and \$41.8 million (\$25 million are new funds that are part of the President's request) in FY 2015 in pollinator health research and extension efforts. This funding is provided to public and private universities and colleges, including land-grant universities.

Examples of accomplishments from NIFA funded research and extension grants between fiscal years 2009 and 2013 include:

- Two Coordinated Agricultural Projects were funded by Agriculture and Food Research Initiative (AFRI) and support 20 Land Grant University research and extension scientists and three USDA-ARS laboratories focusing on CCD and other factors causing bee declines.
- The first Bee Coordinated Agricultural Project (CAP) team, funded by AFRI in 2009, conducted basic and applied research on factors associated with CCD. Results included:
 - A Best Management Practices Guide was published which included educational videos and bee health bulletins for beekeepers.
 - These materials are also available through the Bee Health Community Page, which serves as a repository of peer-reviewed, credible scientific information for the bee community.
- Exposure to pesticide-contaminated dust from abrasion of certain pesticide-treated corn seed was found to have negative effects on honey bees in laboratory and field settings. Researchers are currently conducting experiments to determine how honey bees and other pollinators respond to environmentally relevant levels and whether a significant number of bees would likely be present in or around fields that are planted or seeded.
- Research showed that the *Varroa* mite is an important vector of the Israeli Acute Paralysis Virus (IAPV), a disease that was strongly correlated with CCD.
- Much research has focused on pesticide use as one of the causes of pollinator decline. AFRI funded research is also looking at the use of adjuvants and inert ingredients in pesticide formulations. Research is showing that the penetrating enhancers, surfactants and adjuvants can be more toxic on pollinators than the active ingredients are. Research is unraveling the toxicity of the prevailing environmental chemical background to which bees are exposed.

Building on the research findings from the first CAP, a second CAP project was funded beginning in 2010. The Bee Informed Partnership is extension-led project that is focused on decreasing winter losses of honey bee colonies by helping determine which management practices are working best to keep bees alive. One highlight was the establishment of on-the-ground Tech-Transfer Teams in California (now expanded to the Midwest and the Northeastern United

States) to help honeybee queen breeders select for “hygienic behavior,” a trait which helps bees defend against *Varroa* mites, still believed to be the main reason for colony losses. In addition, the teams identify and assess infection levels of several bee diseases from samples provided by beekeepers.

Scientists from USDA-ARS and the NIFA-funded Bee Informed Partnership conduct and release the results of yearly surveys that document the overwintering losses of honey bee colonies. The survey for 2013/2014 began in April 2014 and the losses are expected to be large. The average winter loss rate has averaged 31.5 percent the past few years. The losses are caused by a multitude of factors including inadequate control of *Varroa* mites, inadequate bee forage leading to malnutrition, pesticide exposure – both in the hive and in the field, drought stress – particularly in the Midwest, and other causes.

Another area of investment was in the 2012 Sustainable Bioenergy Challenge Area grant program. One priority was to better understand how land use change to biofuel crops will impact wildlife and pollinators. Wide-scale planting of certain biofuel crops may significantly reduce the amount of habitat with floral resources necessary for sustaining honey bees. Four grants were awarded for pollinators using funding appropriated in FY 2012. The protection of managed pollinators continues to be a high priority topic area. Future research plans in 2014 and 2015 will include:

- Continued funding to the Bee Informed Partnership CAP grant.
- Continued funding of the Integrated Crop Pollination Project.
- Solicitation of research proposals in AFRI’s Foundational program on Plant-Associated Insects and Nematodes program. These projects are expected to address fundamental and applied research on biotic and abiotic factors associated with pollinator declines and developing measures to mitigate these problems.
- Solicitation of research programs from other competitive programs at NIFA such as the Specialty Crop Research Program.
- Continued support smaller-scale targeted research and extension projects with Hatch capacity funds.

The agency is also proposing the creation of the Pollination and Pollinator Health Innovation Institute to utilize input from stakeholders to develop public and private partnerships to better address biological, environmental and management factors associated with the wide-scale decline of honey bees and other pollinators nationwide. The goal of the Institute will be to generate evidence-based data to address known and emerging information gaps to mitigate threats to pollinator health and diversity. The institute will foster partnerships between commodity groups that depend on bees to pollinate their crops, beekeepers that produce honey and provide pollination services to crop producers as well as with researchers, both public and privately funded, to engage in problem solving and that will enable both industries to minimize economic losses and harm to the environment. The Institute will also engage conservation groups to collaborate with relevant government agencies (e.g., USDA, BLM and DOT) and develop the most effective methods to conserve other pollinators.

The major goals of the Pollination and Pollinator Health Institute are anticipated to be accomplished in the next five years:

- Design and improve research frameworks to estimate direct and indirect economic benefits of pollinators to meet pollination requirements of

crops and natural systems and better quantify ramifications of further declines in pollinator health and diversity.

- Identify crop management practices and systems that promote pollinator health and diversity and develop strategies for scaling up in diverse agro-ecosystems.
- Increase pollinators' access to nutritional resources which are affordable to landowners. This will expand upon policies of several USDA agencies (e.g., USFS, NRCS, and FSA) as well as building upon research collaborations with conservation organizations such as the North American Pollinator Protection Campaign, beekeepers and private landowners to accomplish this goal.
- Adopt effective integrated pest management strategies to reduce pests such as parasitic Varroa mites below economic thresholds. These will include monitoring, developing novel chemical, genomic and biological control tactics which do not adversely affect honey bees or the environment
- Expand tech transfer teams currently funded by NIFA that effectively demonstrate how selective breeding for Varroa mite resistance is lowering colony losses. The Institute will solicit grants to encourage transdisciplinary research on bee breeding and to develop sustainable business operations that provide these services for a fee to beekeepers.
- Leverage other governmental and private funding resources to build on knowledge of molecular interactions between pests, diseases and beneficial microbiota, which may be tapped to develop innovative solutions for protect pollinators and improve pollinator health.
- Develop innovative approaches to develop regional or crop specific Best Management Practices (BMPs) that protect both pollinators and crop production. Initiate collaboration with private industry to promote farmer adoption of BMPs for pollinator protection.
- Leverage existing public outreach programs to more effectively educate the next generation of scientists to expand public awareness about the linkage of pollinators with sustaining our nation's food supply as well as involving citizens in efforts to protect pollinators (e.g., Cooperative extension Service; eXtension, 4-H, Master Gardener, Agriculture In The Classroom and Lifelong Learning). For additional leveraging, integrate university-funded outreach and extension programming with conservation groups and private sector/corporate efforts which to expand public engagement in activities that promote pollinator health.

During fiscal years 2009 and 2010, the Economic Research Service (ERS) participated in the USDA pollinators committee and cooperative research agreements with North Carolina State and Montana State Universities to address the economic effects on honey and pollination markets.

No research was conducted during fiscal years 2011 and 2012.

The Senate Report 113-46 accompanying HR. 3547, the fiscal year 2014 Omnibus Appropriations Bill, directed the Economic Research Service, "in consultation where appropriate with commercial beekeepers, to report to Congress on the economic value of honey bees within 180 days of enactment of this act. The report should consider all appropriate direct and indirect economic benefits, including the retail values of honey produced and crops pollinated, as well as identify whether sufficient data exists on crop yield increases resulting from honey bee pollination." The Economic Research

Service has assembled a team of researchers to investigate the commercial value of honey bees in the United States.

In support of the Department's initiatives to improve pollinator health, ERS is collaborating on several investigations with partners at multiple USDA and Federal agencies. These joint research efforts are coordinated through the USDA Honey Bee Health/Colony Collapse Disorder (CCD) Steering Committee and are described in the Committee's Action Plan. The output from selected collaborations will be showcased at an ERS-hosted workshop at the American Agricultural Economics Association Annual Meeting in July, 2014. At this conference, ERS and the Environmental Protection Agency (EPA) will co-host a symposium on the economics of pollinator health. ERS and external cooperators will conduct research on: linkages between land management policy and honey bee health, consumer welfare impacts related to pollinator health challenges, the feasibility of substitute pollinator technology, and the development of improved risk management products for commercial bee keepers.

[The information follows:]

ERS activities related to Colony Collapse Disorder

	FY 2009 Enacted	FY 2010 Enacted	FY 2011 Enacted	FY 2012 Enacted	FY 2013 Enacted	FY 2014 Estimate	FY 2015 Budget
Colony Collapse Disorder Research	\$44,839	\$18,815	\$0	\$0	\$71,978	\$143,956	\$220,000

USDA and the Environmental Protection Agency (EPA), in consultation with other relevant Federal partners, are scaling up efforts to address the decline of honey bee health with a goal of ensuring the recovery of this critical subset of pollinators. NASS supports this USDA - EPA CCD National Action Plan, which emphasizes the importance of coordinated action to identify the extent and causal factors in honey bee and pollinator declines.

As part of this effort, NASS has requested \$2.0 million for FY 2015 to expand the current bee and honey data collections program. The requested funding will allow NASS to focus its resources and expertise to include questions related to colony losses, pests and parasites, management practices, crops pollinated and locations served, as well as estimates of revenues and expenses. Expansion of the loss survey of beehives was strongly encouraged by beekeepers, the National Academy of Sciences, and the USDA Office of the Inspector General. This action will provide improved baseline and annual data to determine the extent of CCD, in addition to providing quantitative information on potential causal factors, essential to the industry.

NASS may supplement with a targeted survey, following feasibility analysis, of small beekeepers (< 5 colonies) and of recipients of pollinator services. NASS is committed to collaborating with USDA and the other departments on a unified and complementary approach to develop and support the Pollinator Health Initiative. This will allow NASS and its collaborators to address critical information needs at an accelerated pace and guide honey bee management at a national scale.

Asian Long-Horned Beetle

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension activities related to the Asian Long-Horned Beetle, including participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: In support of the Animal and Plant Health Inspection Service (APHIS) eradication program, ARS has:

- Discovered a pheromone that female Asian Long-horned Beetles (ALB) release to attract males that could lead to better lures and traps.
- Developed a field guide for surveys used by APHIS and State Departments of Natural Resources, and internationally.
- Determined that a particular maple tree known as painted maple is highly attractive to ALB, resulting in a sentinel tree system for early detection of adult beetles used by the California Department of Food and Agriculture and the New Hampshire Department of Agriculture. The Massachusetts Department of Agricultural Resources is also planning a pilot project.
- Discovered and evaluated kairomones (host odors) of painted maple sentinel trees that show promise as an attractant for early detection of adult beetles.
- Identified the male aggregation pheromone and female sex pheromone of ALB, as well as plant volatiles from host trees, resulting in a potential attractant for early detection of adult ALB.
- Identified and determined that several natural enemy species native to the United States and to Europe successfully parasitize ALB, with potential use in biological control.
- Conducted foreign exploration for natural enemies of ALB in its native Asian range and began evaluating their potential use in biocontrol.
- Identified an encapsulated insecticide that quickly kills adult ALB that has been used by APHIS to target control of ALB where no other method exists. This insecticide is also used by the California Department of Food and Agriculture, in combination with the highly attractive sentinel tree, for detection and control of ALB in an attract-and-kill strategy.
- With the Baylor College of Medicine, and supported by National Institutes of Health (NIH), recently sequenced the genome of ALB as part of the ARS-led i5K Initiative to sequence 5,000 insect genomes.

In 2014 and 2015 ARS research will focus on refining models that predict the spread of ALB, targeting the increasingly diverse and varied areas found infested by ALB (e.g., forests in the Worcester, MA, infestation and rural areas in the Ohio infestation). ARS research will also refine models that predict ALB adult emergence from trees, facilitating predictions about when the beetle will reach peak levels. Collectively, these models will help APHIS increase the effectiveness of existing and new survey and control strategies, and significantly reduce the cost of eradication. ARS will also focus on expanding the impact of the sentinel trees and artificial lure, developing the attract-and-kill strategy, and finding and using additional biological control agents for safe beetle suppression. New

foreign exploration in Korea is likely to find new biological control agents of ALB eggs.

ARS research activities related to Asian Long-Horned Beetle funding in fiscal year 2009 was \$1,497,000; fiscal year 2010 was \$1,516,000; fiscal year 2011 was \$1,512,000; fiscal year 2012 was \$1,169,000; fiscal year 2013 was \$1,065,000; fiscal year 2014 is estimated at \$1,089,000; and fiscal year 2015 is estimated at \$1,089,000.

NIFA supports research on Asian Long-Horned Beetle and provided \$2,156,000 in FY 2009, \$1,266,000 in FY 2010, \$732,000 in FY 2011, \$131,000 in FY 2012, and \$118,000 in FY 2013. The funding levels for FY 2014 and FY 2015 are not available. In 2014 and 2015, NIFA plans to continue to support research in the area of Asian Long-Horned Beetle, including refining identification and monitoring techniques, host plant resistance, and biological control. Funding will support activities that include prevention, early detection, and development of pest management strategies to mitigate the damage caused by Asian Long-Horned Beetle.

ERS conducted no research in this area in fiscal years 2009 through 2013, and none is planned for fiscal years 2014 or 2015.

Food Defense and Homeland Security

Mr. Aderholt: Please update the summary provided in the fiscal year 2013 hearing record regarding all USDA research and extension activities related to food defense and homeland security, including participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: The USDA food defense and homeland security research activities are linked to Homeland Security Presidential Directive-9 (HSPD-9) and the President's National Strategy for Countering Biological Threats. ARS has unique and critical resources dedicated to ensuring that agricultural production is secure, sustainable, and efficient with the aim of providing American consumers with a healthy, safe, and affordable food supply. Many of these responsibilities involve protecting people, crops, livestock, poultry, aquaculture, and other living resources from pests and pathogens with the potential to cause severe economic consequences and/or public health incidents. USDA research and extension programs activities specifically target gaps in our food defense strategy by providing the scientific information and tools needed to mitigate the impact of incursions on our food supply.

The Agricultural Research Service (ARS) will continue to implement strong national research programs for food defense and homeland security, including research on the emerging Coronaviruses of swine in the United States. ARS will conduct research to minimize the risk to American agriculture of diseases, contamination, and/or willful destruction of crops and animals to ensure that the safety of the food supply is not compromised. ARS conducts food defense and homeland security research in collaboration with the Animal and Plant Health Inspection Service, Food Safety and Inspection Service, Foreign Agricultural Service, Food and Drug Administration, Department of Homeland Security, Department of Defense, State Department, Environmental Protection Agency, Human and Health Services, and the Department of the Interior.

ARS research activities related to food defense and homeland security funding in fiscal year 2009 was \$35,454,000; fiscal year 2010 was \$39,170,000; fiscal year 2011 was \$35,715,000; fiscal year 2012 was \$35,721,000; fiscal year 2013 was \$33,175,000; fiscal year 2014 is estimated at \$33,183,000; and fiscal year 2015 is estimated at \$33,183,000.

NIFA supports research on Food and Agriculture Defense Initiative and Homeland Security and provided \$43,700,000 in FY 2009, \$44,848,000 in FY 2010, in FY 2011 \$40,638,000, \$40,647,000 in FY 2012, and \$37,582,000 in 2013. NIFA expects to provide, \$42,072,000 in FY 2014 and \$42,072,000 in FY 2015. Funding will support nationally-coordinated plant and animal disease diagnostic networks and activities to identify and respond to high risk biological pathogens in the food and agricultural system.

The Economic Research Service (ERS) conducted research during fiscal years 2009 through 2012 to support the needs set forth under the Homeland Security Presidential Directive (HSPD) 9. Research developed and refined the capacity to conduct economic analyses of plant and animal disease outbreaks. ERS projects assessed the value of available data containing geographic information that could be used to improve geospatial analysis of homeland security issues related to food and agriculture industries.

In fiscal years 2014 and 2015 at a cost of \$934,000 each year, ERS researchers will collaborate with Federal and academic researchers to examine how economic variables and factors affect animal and crop disease outbreak assessments. This work will examine how economic analysis can help to develop clearer views of actual and hypothetical outbreaks, and to more fully identify what factors are significant in measuring the success of a mitigation or prevention efforts. This research focuses on efforts to introduce economic components into epidemiological analysis that will allow analysts and decision makers to include social (e.g., impacts on rural communities) considerations and expand the number of criteria that may be used to determine effective outbreak responses. In fiscal year 2015 ERS will continue to invest in the data and analytical capacity needed to provide the current market context and data need to support USDA Homeland Security event assessments. In addition, ERS is contributing expertise as subject matter experts to the Department of Homeland Security, Science and Technology Directorate, for the Agro-terrorism Risk Assessment.

[The information follows:]

ERS activities related to *Food Defense and Homeland Security*

	FY 2009 Enacted	FY 2010 Enacted	FY 2011 Enacted	FY 2012 Enacted	FY 2013 Enacted	FY 2014 Estimate	FY 2015 Budget
Food Defense and Homeland Security	\$983,000	\$983,000	\$983,000	\$934,000	\$857,000	\$934,000	\$934,000

Antibiotic Resistance

Mr. Aderholt: Please update the summary provided in the fiscal year 2012 hearing record regarding all USDA research and extension activities related to antibiotic resistance, including participating agencies and funding, for fiscal years 2009 through 2012. Also describes USDA's plan for fiscal years 2013 and 2014.

Response: The Agricultural Research Service (ARS) conducts antimicrobial resistance research, and is actively involved with the National Antimicrobial Resistance Monitoring System (NARMS), which is funded and managed by the Food and Drug Administration (FDA). In response to an FDA request and the need to improve the animal sampling plan, ARS has implemented a series of pilot studies that involves both universities and several ARS centers to collect samples on farm and at slaughter houses to perform antimicrobial resistance testing. These data will be used by FDA and USDA's Food Safety and Inspection Service to make scientifically-based decisions for future animal sampling for NARMS. ARS is completing the pilot study analysis and conducting two other pilot studies that are evaluating emerging resistance and a potential intervention. The pilot project data collection and analysis is ongoing and is expected to be completed in the fall of 2014. In addition, ARS conducts research on the basic ecology of antimicrobial resistance to obtain a better understanding of the mechanisms for the development of resistance in production livestock. There are also a number of ongoing research projects assessing practices that will reduce the use of antibiotics in food producing animals. ARS co-sponsored an international meeting with the Office of International Epizootics on alternatives to antimicrobials which raised the awareness of this important initiative.

Research on alternatives to antibiotics is an important effort by ARS and involves several strategies. For example, ARS is evaluating and developing vaccines for *E. coli* in cattle and *Salmonella* spp. in swine and poultry as well as evaluating the role of genetics and immune modulators. In 2014 and 2015, ARS plans to continue the basic research on antimicrobial resistance as well as enhance the research on alternatives to antibiotics by evaluating the role of alternatives (both at the pre-harvest/on-farm and post-harvest level) and the role of management practices and the environment on the prevalence of antimicrobial resistance and emerging pathogens in food animals.

ARS research activity related to antibiotic/antimicrobial resistance funding in fiscal year 2009 was \$6,482,000; fiscal year 2010 was \$6,594,000; fiscal year 2011 was \$8,998,000; fiscal year 2012 was \$8,998,000; fiscal year 2013 was \$8,721,000; fiscal year 2014 is estimated at \$13,060,000; and fiscal year 2015 is estimated at \$14,102,000.

NIFA supports research on antibiotic resistance and provided \$752,000 in FY 2009, \$1,981,000 in FY 2010, \$2,900,000 in FY 2011, \$1,686,000 in FY 2012; and \$1,682,000 in FY 2013. It is estimated in fiscal years 2014 and 2015 NIFA will fund antibiotic resistance work at a comparable level of about \$1,800,000 in fiscal year 2014 and \$31,093,000 in fiscal year 2015. In FY 2015, NIFA proposes to create a new Innovation Institute on Antimicrobial Resistance (AMR). The AMR Institute, funded at \$25 million, will address AMR through a systems approach from the farm and farm environment to the consumer and thus engage public health medicine. This systems approach will engage public-private partnerships inclusive of trans-disciplinary teams of research, education, and extension/outreach personnel, animal scientists,

veterinarians, microbiologists, entomologists, soil scientists, social and behavioral scientists, engineers, and health-related practitioners – the latter typically excluded from agricultural and complex AMR research related work at the ecosystem level. Also, NIFA supported work includes studies of antimicrobial usage in dairy, beef, swine, and/or poultry production systems. Topics include prevalence and control of food-borne pathogens in meat and meat products, and livestock management practices that minimize the use of antimicrobials.

During fiscal years 2009 through 2013, the Economic Research Service (ERS) examined the extent to which livestock were fed sub-therapeutic doses of antibiotics, the impact on farm productivity of such feeding, and whether the productivity losses from reducing such use can be offset by other production practices. These efforts resulted in published research on the hog and broiler sectors, as well as further ongoing research, and relies heavily on special questionnaire versions of the Agricultural Resource Management Survey covering farm operations during 2004 (hogs), 2006 (broilers), 2009 (hogs), and 2011 (broilers), with another hog version planned for 2015 production.

During fiscal years 2014 and 2015 at a cost of \$83,497 and \$84,331, respectively, ERS will continue to examine the impact on farm productivity of reduced feeding of antibiotics at sub-therapeutic levels, as well as the economics of alternatives to such uses. The agency will also use estimates of the farm-level cost and productivity impacts of restrictions on antibiotic use in order to model the potential market impacts of restrictions. That research will focus on livestock and meat prices, production, consumption, exports, and imports. The research findings will support USDA decision making on policies and programs to address the issue of antimicrobial resistance in animal agriculture by identifying the economic effects of possible restrictions on sub-therapeutic antimicrobial use, and by examining alternatives to sub-therapeutic antimicrobial use in on-farm production practices. ERS is collaborating with other USDA science and program agencies through the USDA Antimicrobial Resistance Working Group and plans to work with the proposed Antimicrobial Resistance Innovation Institute (AMRI) to examine the economic implications of efforts to combat antimicrobial resistance.

ERS activities related to *antibiotic pest resistance*

	FY 2009 Enacted	FY 2010 Enacted	FY 2011 Enacted	FY 2012 Enacted	FY 2013 Enacted	FY 2014 Estimate	FY 2015 Budget
Antibiotic Pest Resistance research	\$92,078	\$93,958	\$82,876	\$82,876	\$82,876	\$83,497	\$84,331

USDA Plant and Animal Genome Mapping Activities

Mr. Aderholt: Please update the summary provided in the fiscal year 2012 hearing record regarding all USDA plant and animal genome mapping activities, including participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: Agricultural Research Service (ARS) animal and plant genetic and genomic support for agricultural animal and crop species is coordinated through consortiums comprised of Federal agencies (National Institutes of Health, USDA-ARS, USDA-National Institute of Food and Agriculture, National Science Foundation, Department of Energy), universities, and the private sector. These initiatives are providing opportunities for expanding genomic resources, advancing systems biology and biomedical research, translating basic discovery to tools for improving animal and crop production and protection, and developing coordinated solutions to data access, analysis, and synthesis.

For animal and crop genome mapping activities, second and third generation DNA sequencing instruments are being used to reduce sequencing costs, provide longer sequence reads and reduce errors in genome sequences to improve research productivity dramatically.

Bovine, poultry (chicken and turkey), swine, small ruminant (sheep and goat), insects and various aquaculture species (catfish, trout, Pacific oyster) have all had mapping and sequence progress in the past year, which enhances the ability to use genomic information in animal improvement. Database development for sharing data and analytical tools has been a focus and continues to be a high priority.

In fiscal year 2014, initiatives for animal production include increases for genomic/phenotypic knowledge based development including:

- Increasing the rate of genetic improvement for economically valuable traits relating to health, parasite resistance, production efficiencies and animal adaptability through use of genomic information;
- Improving phenotype analysis including development of high throughput phenotyping platforms;
- Identifying germplasm that is better adapted to changing and extreme environmental conditions;
- Safeguarding and utilizing animal genetic resources, associated genetic and genomic databases, and bioinformatic tools; and
- Developing information, tools, and technologies that can be used to more rapidly improve animal production systems.

The fiscal year 2015 budget initiatives for animal production include: 1) advanced livestock genetic improvements and translational breeding for enhanced food production and 2) climate resilient livestock production systems. The proposed increases will enhance genomic/phenotypic knowledge-based development, including:

- Improving trait analysis and performance evaluation (phenotyping);
- Collecting of genomics data to improve prediction accuracy using next generation methods; and
- Developing animal genetic resources to advance food security.

The research is heavily focused on the development and application of genomics technologies to increase the efficiency and product quality of beef, dairy, swine, poultry, aquaculture, and sheep systems.

Crop genome mapping activity expanded greatly the past year and accelerated the genetic improvement of the major row crops and specialty crops for key traits including disease resistance, drought tolerance, nutritional improvement and yield. Crop database development for sharing data, information, and analytical tools continues to be a priority for crop genome mapping and germplasm improvement.

In fiscal year 2014, new funding in crop production incorporates support for crop genome mapping and investments in the National Plant Germplasm System as follows:

- Improving germplasm using next generation theory and methods for translating DNA sequences (genotype) to traits (phenotype),
- Accelerating access and utilization of genomic and genetic information via the ARS crop genomic and genetic databases including MaizeGDB, SoyBaseCrop, GrainGenes, Legume Information System, and Gramene,
- Accelerating 3-D root imaging for genome mapping of genes for adaptation to drought and nutrient stress, safeguard and evaluate crop genetic resources for food security.

The fiscal year 2015 budget initiatives for crop production include: 1) advanced crop genetic improvements and translational breeding for enhanced food production and 2) climate resilient crops. The proposed increase will accelerate crop breeding and the improvement of high value traits in field crops, fruits and vegetables via the integration of data, cyber infrastructure, and bioinformatic tools as follows:

- Expand the capacity of ARS cyberinfrastructure to serve more crops including fruits and vegetables,
- Develop new bioinformatic tools and training that support genome-enabled breeding and the genetic analyses of traits,
- Accelerate the integration of ARS genomic information and trait information/phenotyping pipelines and crop databases with high performance computing systems.

ARS research activities related to animal genome mapping funding in fiscal year 2009 was \$30,011,000; fiscal 2010 was \$30,765,000; fiscal year 2011 was \$30,487,000; fiscal year 2012 was \$29,611,000; fiscal year 2013 was \$27,791,000; fiscal year 2014 is estimated at \$33,095,000; and fiscal year 2015 is estimated at \$31,032,000. ARS research activities related to plant genome mapping funding in fiscal year 2009 was \$12,511,000; fiscal year 2010 was \$13,254,000; fiscal year 2011 was \$13,242,000; fiscal year 2012 was \$12,971,000; fiscal year 2013 was \$12,009,000; fiscal year 2014 is estimated at \$15,096,000; and fiscal year 2015 is estimated at \$15,096,000.

The National Institute of Food and Agriculture (NIFA) supports research on plant and animal genome mapping and provided \$56,261,000 in FY 2009, \$55,837,000 in FY 2010, \$60,962,000 in FY 2011, and \$48,354,000 in FY 2012. Estimated funding amounts for FY 2013 and FY 2014 are \$41,980,000 and \$48,972,000 respectively. In 2014 and 2015 NIFA plans to continue to support research in the areas of Plant and Animal Genomics. Animal genomics efforts for USDA continue to follow the research, extension, and outreach priorities set forth in the USDA Animal Genomics Blueprint for 2008-2017. NIFA has

addressed these priorities related to animal genome mapping through competitive program opportunities. As a result, the draft genome sequences of chicken, turkey, cattle, and pig are now completed. This was possible with USDA partnering with other federal agencies, such as the National Institutes of Health, stakeholders, states and international entities. Funds are being used for plant genome mapping to include genome structure and organization, functional genomics, bioinformatics and applied genomics.

ERS conducted no research in this area in fiscal years 2009 through 2013, and none is planned for fiscal years 2014 and 2015.

Citrus Greening

Mr. Aderholt: Please provide a summary of all USDA activities regarding citrus greening, including participating agencies and funding fiscal years 2009 through 2012. Please include information on the citrus greening advisory board. Also describe USDA's plan for fiscal years 201 and 2015.

Response: Huanglongbing (HLB, also known as Citrus Greening), transmitted by the Asian citrus psyllid, is the most serious threat to the U.S. citrus industry since it was first detected in Florida in 2005, causing millions of dollars in damage and lost revenue in Florida. The disease was confirmed in an orange grove in Texas in 2011, and in 2012 was reported in California from a single residential tree that was immediately removed. Infected trees identified over the approximately 20 acre grove in Texas are being removed. Psyllid suppression efforts continue in all citrus producing states, since greening threatens the citrus industry wherever it is discovered. Currently, the Florida industry has serious cause for concern, due to the significant fruit drop in 2014 as a result of the disease.

Since December, 2009, the USDA's - Animal and Plant Health Inspection Service (APHIS), Agricultural Research Service (ARS), and National Institute of Food and Agriculture (NIFA) have coordinated research, extension, and regulatory efforts as part of the Citrus Health Response Program (CHRP) with industry leaders from primary citrus-producing states. The goal of the Science and Technology Committee that emerged through this effort is to fully coordinate individual research projects for solutions to citrus greening. Funding for these programs comes from several sources, including federal and state funds, and grants provided by state box tax programs.

Recently, Secretary Vilsack established the HLB MAC (Multi-Agency Coordination) group in response to the citrus industry's request for more urgency and greater coordination in the response to HLB. Immediately, USDA established a new, unified emergency response framework to better position the Department to respond in a more agile, concerted, and direct way to address both the immediate and long-term needs of the citrus industry. The Group includes representatives from USDA's APHIS (the MAC lead agency), ARS, and NIFA, as well as State departments of agriculture and the citrus industry. The HLB MAC Group will help to coordinate and prioritize Federal research with industry's efforts to complement and fill research gaps, reduce unnecessary duplication, speed progress, and more quickly provide practical tools for citrus growers to use. The HLB MAC Group will quickly work toward delivering practical and short-term solutions to the growers in their efforts to combat the disease. A total of \$21 million has been committed to fund promising projects expected to provide such solutions to citrus greening. Although solutions to greening are especially critical to survival of the

Florida industry, all citrus producing states are threatened by this disease and will benefit from the solutions and tools that are developed.

ARS research plans for FY 2014 and FY 2015 to control and manage citrus greening are multifaceted, and build on interdisciplinary research progress made since 2009. This includes (1) continued improvement on biological and chemical control methods that provide significant saving to the growers and reduce pesticide use; (2) new strategies for sampling and survey that aid regional and national disease eradication and psyllid suppression programs; (3) early detection of the organism that causes greening, to detect in the insect vector and in trees prior to symptom development; (4) therapeutic treatments for infected trees (including thermo-therapy); (5) new methods that interfere with transmission of the pathogen by the insect vector; and (6) production of promising commercial citrus cultivars and rootstocks that are tolerant or resistant, that can be used in an integrated management program. Although progress has been made in all areas, many of these are long term research programs. Currently, the best solution is that of suppressing psyllid populations on an area-wide basis and removal of infected trees to eliminate the source of inoculum, followed by replant and protection of healthy trees until bearing age.

ARS research activity related to citrus greening funding in fiscal year 2009 was \$642,000; fiscal year 2010 was \$1,645,000; fiscal year 2011 was \$1,638,000; fiscal year 2012 was \$1,490,000; fiscal year 2013 was \$1,389,000; fiscal year 2014 is estimated at \$1,828,000; and fiscal year 2015 is estimated at \$1,828,000.

NIFA's discretionary funding supports research on Citrus Greening and provided \$878,000 in FY 2009, \$1,665,000 in FY 2010, \$217,000 in FY 2011, in FY 2012, \$9,645,000, and an estimated investment of \$630,000 in FY 2013. In FY 2014 and FY 2015 NIFA-USDA plans to continue to support research in the area of Citrus Greening by providing \$25 million in Specialty Crops to address citrus health issues.

NIFA is an active member of the Citrus Health Research Program, which is coordinating research across public-sector research organizations (APHIS, ARS, NIFA and land-grant universities) in partnership with the National Citrus Board. This group is focused on developing immediate solutions that will make it possible to keep trees that are already infected alive and productive (extremely urgent for Florida) and to slow or prevent the spread of the Huanglongbing (HLB) disease and the psyllid vector throughout the U.S. growing region. The longer-term strategy includes the development of new citrus cultivars that will provide citrus growers trees that are unaffected by the psyllid vector and are resistant to HLB (as well as Canker and other diseases) and possibly a transition to a new cropping system.

NIFA provided funding to 18 competitive projects related to citrus greening from FY 2008 to FY 2012. These projects involved nine organizations: Arizona State University; Carnegie Mellon University; Citrus Research & Development Foundation; ISCA Technologies, Inc.; Puerto Rico Agricultural Extension Service; University of California; University of Florida; USDA/ARS; and Washington State University.

ERS conducted no research in this area in fiscal years 2009 through 2013, and none is planned for fiscal years 2014 and 2015.

Marmorated Stinkbug

Mr. Aderholt: Please provide a summary of all USDA activities regarding the brown marmorated stinkbug, including participating agencies and funding for fiscal years 2009 through 2012. Please include information on the citrus greening advisory board. Also describe USDA's plan for fiscal years 201 and 2015.

Response: The Agricultural Research Service (ARS) has assumed a leadership role in the effort to advance priorities established in the National Institute of Food and Agriculture (NIFA)-sponsored Brown Marmorated Stink Bug (BMSB) Working Group, as detailed in the group's strategic plan (<http://www.northeastipm.org/working-groups/bmsb-working-group/>). ARS has implemented an aggressive research program and actively partnered with the Animal and Plant Health Inspection Service, Environmental Protection Agency (EPA), and land-grant universities across the United States to accomplish these priorities.

ARS researchers have established the efficacy of a broad range of insecticides against BMSB to ensure that growers have critical stop-gap management solutions, identified natural enemies of BMSB, identified natural lures, and have developed traps for monitoring BMSB and effective methods of biocontrol.

Example accomplishments are as follows:

- ARS scientists in Kearneysville, West Virginia, lead an ongoing NIFA Specialty Crop Research Initiative (SCRI) project (\$5.7 million) that is designed to develop monitoring and management tools for BMSB in specialty crops. Fourteen cooperating institutions from ten States have partnered on this project. Another proposal, funded by the NIFA Organic Research and Extension Initiative, targets tools for the organic farming community.
- ARS scientists in Kearneysville, West Virginia, have determined the effectiveness of currently labeled insecticides and those being considered for emergency exemptions to control BMSB. A key finding was the short residual activity of materials under field conditions. Several pyrethroid-based insecticides were found to be excellent controls. One, bifenthrin, received an EPA Section 18 (emergency) exemption for use on BMSB in orchards. A neonicotinoid, Dinotefuran, was also found to be effective. Dinotefuran also received an EPA Section 18 (emergency) exemption for use on BMSB in orchards.
- ARS scientists in Kearneysville, West Virginia, are developing a monitoring trap for BMSB that uses olfactory and visual cues that are attractive to BMSB. Traps baited with lights representing attractive wavelengths and intensities captured 200-400 times more adults than unbaited traps.
- ARS scientists in Beltsville, Maryland and Kearneysville, West Virginia, collaborated on field bioassays and have made a breakthrough in identifying the aggregation pheromone from adult males. Tests conducted throughout 2012 and 2013 confirmed this identification, providing the first effective means to monitor and trap the bug

throughout the season.

- Scientists in Beltsville, Maryland, and Kearneysville, West Virginia, are further investigating a recently identified powerful synergist (increases trap captures 100-fold) for the aggregation pheromone as part of an IPM program. ARS researchers also identified light-based cues for BMSB that significantly enhance attractiveness of the traps.
- ARS scientists in Beltsville, Maryland, have found some natural compounds that can deter bug feeding on the plants and repel them away from their food source to protect the crops from damage.
- ARS scientists in Beltsville, Maryland, initiated a new project using recent technologies to develop inhibiting RNAs (RNAi) targeting specific genetic material of the BMSB. These will be developed as novel molecular biopesticides for BMSB control.
- In cooperation with the ARS overseas biocontrol laboratories, ARS researchers in Newark, Delaware, are leading long-term projects for biological control solutions, with foreign exploration in Asia, to find natural enemies adapted to BMSB in its native range. These scientists are coordinating host range evaluations at the Newark laboratory and several cooperator locations across the United States.
- ARS researchers in Washington, D.C., Newark, Delaware, and Montpellier, France, are working together on taxonomic research needed to conclusively identify key indigenous and Asian natural enemies of BMSB. Since 2012, these researchers have also sponsored annual identification workshops to train other researchers across the country.

In fiscal years 2014 and 2015, ARS will focus on developing the lure-base monitoring systems and associated tools and test biocontrol agents for release. Researchers will focus on understanding the biology of the BMSB with the intent of interrupting its movement in the field. ARS researchers in Newark, DE, will continue screening the impact of compounds registered for use in organic crops on stink bug parasitoids (as part of the NIFA Agriculture and Food Research Initiative).

Funding for ARS research activities related to BMSB is as follows: no funding in fiscal year 2009; fiscal year 2010 was \$800,000; fiscal year 2011 was \$750,000; fiscal year 2012 was \$875,000; fiscal year 2013 was \$798,000; fiscal year 2014 is estimated at \$1,415,000; and fiscal year 2015 is estimated at \$1,415,000.

NIFA supports research on the brown marmorated stink bug (BMSB) and provided \$1,133,000 in FY 2009, \$1,133,000 in FY 2010, in FY 2011 \$536,000 and \$3,182,000 in FY 2012 and \$472,000 in FY 2013 (estimated). It expects to provide \$3,198,000 in FY 2014 and \$3,198,000 in 2015. Funding will support activities that include pest management of the BMSB.

ERS conducted no research in this area in fiscal years 2009 through 2013, and none is planned for fiscal years 2014 and 2015.

Alfalfa

Mr. Aderholt: Please provide a summary of all USDA activities regarding alfalfa, including participating agencies and funding, for fiscal years 2009 through 2012. Also describe USDA's plan for fiscal years 201 and 2015.

Response: Agricultural Research Service (ARS) scientists are conducting alfalfa genetic improvement and marker selection research for biotic and abiotic stresses to build a genetic pipeline to help accelerate the development of superior performing plants. The Plant Germplasm Introduction and Testing Research Station expands the genetic diversity in the U.S. alfalfa germplasm collection, improves availability of information about alfalfa genetic resources, and distributes alfalfa germplasm evaluated for priority agricultural traits. The value of alfalfa produced annually is \$10.9B which ranks fourth in the U.S. as a commodity (NASS 2013).

For FY 2014 and FY 2015, ARS has developed a coordinated national research plan to increase the impact of agency alfalfa research and to build effective linkages with university and industry partners. The coordinated plan addresses three broad areas of research that provide value to the alfalfa, forage, and dairy industries including, but not limited to the following: 1) germplasm improvement (yield, biotic and abiotic stress, marker assisted selection); 2) management for animal nutrient intake and for revenue lines; and 3) ecosystem services (rotational effect, soil health [N, P, K, microbes], and carbon sequestration). More specifically, ARS scientists are identifying molecular markers for disease and nematode resistance, salt tolerance, drought resistance and climate resilience to accelerate alfalfa genetic improvement. ARS scientists are also exploring novel harvest technologies to improve the utility of fresh cut alfalfa and alfalfa hay for multiple uses and to expand the marketing opportunities for alfalfa products. An additional research focus is to improve ensiling techniques and technologies to improve value and reduce waste.

Specific accomplishments for alfalfa research include:

Rapid DNA-based paternity testing assay for alfalfa that will speed rate of alfalfa improvement. In alfalfa variety development programs, the pollen donors of plants being evaluated are mostly unknown. This lack of paternal identity leads to slower genetic improvement from alfalfa breeding programs. ARS developed a low-cost, rapid DNA-based paternity testing laboratory assay for alfalfa, including necessary computational software. This new technology will double the amount of genetic information available to alfalfa breeders allowing them to target and select specific genetic lines and significantly increase the yield and adaptability of existing and developing alfalfa varieties.

Novel alfalfa management options to contribute to improved ethanol potential. In an alfalfa biomass energy production system, alfalfa hay can be separated into cellulose-rich stems to produce liquid fuel (ethanol) and leaves to produce a valuable high protein livestock feed. Maximizing yield of leaf protein and stem cell wall sugars is essential for optimum economic return of such a biofuel production system. ARS found that using new biomass type alfalfas together with modified cutting management strategies will increase the profitability of alfalfa biomass production systems by reducing costs as much as 19%.

Elevated salinity of soils greatly limits alfalfa production.

Identifying and characterizing genes that control the complex trait of salt tolerance in alfalfa will accelerate conventional breeding programs and increase production efficiency, sustainability and value. ARS performed next generation sequencing to determine the activities of genes in alfalfa cultivars that contrasted in salt tolerance. The findings revealed a broad spectrum of genes affected by salt stress. Knowledge on genes and gene expression will speed the development of new salt-tolerant cultivars and marker-assisted selection in breeding programs.

Nitrogen supply from alfalfa. Alfalfa captures nitrogen from the air for use by the plant. Over time, this process enriches the soil with nitrogen, providing fertilizer for later crop rotations. However, it is not known how this nitrogen supply varies with crop and soil management. ARS found that the residual nitrogen supply was not affected either by livestock manure application to the alfalfa or by using no-tillage instead of complete mixing of alfalfa residue with the soil. It was also discovered that approximately 50% of the time, alfalfa provides residual nitrogen adequate for both the first and second subsequent crops of corn, saving the farmer about \$160 per acre and reducing the amount of fossil fuel needed to produce corn.

ARS research activity related to alfalfa funding in fiscal year 2009 was \$3,367,000; fiscal year 2010 was \$4,124,000; fiscal year 2011 was \$3,768,000; fiscal year 2012 was \$4,322,000; fiscal year 2013 was \$4,393,000; fiscal year 2014 is estimated at \$4,918,000; and fiscal year 2015 is estimated at \$4,918,000.

The National Institute of Food and Agriculture supports research on alfalfa and provided \$2,425,000 in FY 2009 and \$2,025,000 in FY 2010, and \$1,264,000 in FY 2011, \$697,000 in FY 2012, and \$1,299,000 in FY 2013 (estimated). The active AFRI, Hatch, and Biotechnology Risk Assessment program projects include, but are not limited to, alfalfa topics such as: understanding and mitigation strategies for co-existence/gene flow in alfalfa; improving alfalfa quality and production as a biofuel feedstock; enhancement of alfalfa forage quality for animal feed by alfalfa breeding and genetic improvements; developing tolerance to changing climatic conditions and biotic diseases in alfalfa production by breeding and genetic enhancement technologies; and understanding interactions of symbiotic bacteria with their alfalfa host in fixing nitrogen from the soil. Other programs have also included alfalfa in multi-crop studies. In FY 2014, NIFA is initiating a new program first funded in 2014 appropriations of \$1.4 million to support Alfalfa and Forage Research. The legislative authority states that research and extension grants may be made for the purpose of studying improvements in alfalfa and forage yields, biomass and persistence, pest pressures, the bioenergy potential of alfalfa and other forages, and systems to reduce losses during harvest and storage. NIFA has developed a request for applications based on the legislative authority, stake holder input, strategic plans developed by USDA, REE and NIFA. The timeline for implementation of this program is as follows: estimated release date of the RFA is May 6, 2014; deadline for submission of applications is June 16; panel date is July 21; proposals to grants office for processing by August 15; awards made September 15. An estimated eight awards will be made.

ERS conducted no research in this area in fiscal years 2009 through 2013, and none is planned for fiscal years 2014 and 2015.

Protection of Research

Mr. Aderholt: At the hearing on March 26, the Subcommittee discussed with Dr. Wotecki some recent incidents of foreign nationals attempting to steal agricultural technology. Please provide additional information on USDA's policies, procedures and protocols to protect its research, data and information systems from espionage.

Response: ARS has multiple policies and procedures, consistent with Departmental policies and procedures, in place to protect the mission of the agency from insider threats by focusing resources in two key areas: 1) access to laboratory and administrative facilities throughout the United States and 2) protection of intellectual property. Additional information is provided as follows:

1) *Access to laboratory and administrative facilities throughout the United States.* USDA has in place a multi-faceted identification, clearance, oversight, and review process intended to protect itself from foreign national espionage. That process is presently being modified to ensure that each of its agencies has a comprehensive foreign national visitor access management program in place that proactively identifies any issues of concern and responds quickly to emerging areas of interest. Source checks in advance of visits, single points of contact for overall program responsibilities, appropriate clearance levels for program management, and specific guidance are all components of the enhanced program. Each procedure individually, and all collectively, function to ensure that access to unauthorized areas within facilities, discussions unrelated to job responsibilities or authorities, access to sensitive information, and access to information systems do not occur unless proper preauthorization has occurred. ARS policies, procedures and protocols to protect its research, data and information systems from espionage include:

- IT securities for logging on to any ARS network from any location or device.
- Physical securities for domestic and foreign nationals to access ARS labs and field locations.
- Virus protection software required to be installed and updated on all ARS devices.
- Policies that require use of lab notebooks within an ARS location.
- External and internal cameras operational; visitors are required to sign in and are escorted by authorized personnel through facilities.
- All computers password protected per agency/department policies and not accessible by visitors, with the exception of equipment with dedicated computers that are being serviced by a vendor.

2) *Protection of intellectual property.* Protection of intellectual property (IP) includes an extensive array of policies and procedures, as follows:

- A) Protecting IP through agreements
 - i) Confidentiality Agreement (CA)
 - ii) Material Transfer Agreement (MTA)
 - iii) Cooperative Research and Development Agreement (CRADA)
 - iv) Material Transfer Research Agreements (MTRA)
 - v) Trust Fund Cooperative Agreement (TFCA)
 - vi) Non-Funded Cooperative Agreement (NFCA)
- B) Protecting IP through official delegation of authority
 - i) Technology Transfer in ARS (REE Policy and Procedure)
 - ii) Delegation of Authority for Authorized Departmental Officers (REE Policy and Procedure 700.0 v.2)
 - iii) Selection, Appointment, and Responsibilities of the Authorized Departmental Officer's Designated Representative (ADODR) (REE Policy and Procedure 701.0)
- C) Protecting IP through training
 - i) Training is required for scientists to be delegated authorities as an Authorized Departmental Officers Designated Representative
 - ii) Good Laboratory Notebook Practices training from the ARS Office of Technology Transfer
(<http://www.ars.usda.gov/business/docs.htm?docid=19045&pf=1>)

The Economic Research Service protects the security of confidential data and market sensitive information from multiple sources of inappropriate use, including potential espionage. ERS sets file permissions to limit access to restricted data to only those staff members who have a demonstrated need for the information. The most sensitive data is housed in secure data labs that cannot be accessed via the Agency's IT network. All staff members with access to restricted data must complete annual data security training. ERS follows USDA procedures for security checks for permanent staff, temporary staff, and visitors.

The National Agricultural Statistics Service's (NASS) International Programs Office has consulted with the USDA Office of General Counsel (OGC) and asked for guidance on working with foreign visitors. NASS and OGC are working together to review security protocols and documentation to establish the proper levels of collaboration between U.S. and foreign nationals.

National Agricultural Statistics Service

Mr. Aderholt: Please update the list provided in the fiscal year 2014 hearing record of the countries to which NASS is providing technical assistance, including a brief description of the assistance provided, for fiscal years 2009 through 2013 and estimates for fiscal year 2014.

Response: These activities are conducted on a reimbursable basis with support from other federal agencies. As the premier agricultural statistics agency in the world, the National Agricultural Statistics Service (NASS) is supporting the U.N. Global Strategy to Improve Agricultural and Rural

Statistics. NASS staff support this international effort, which affects world agricultural statistics released by the USDA World Agricultural Outlook Board. Following is a list of countries in alphabetical order and the activities that have occurred, or are planned to occur, for each fiscal year.

Afghanistan

FY 2011: Staff conducted an initial assessment of the capabilities of the government agencies responsible for agricultural statistics in Afghanistan and made recommendations for a capacity building program.

Argentina

FY 2013: Staff, at the request of the U.S. Embassy in Buenos Aires, conducted a series of lectures on agricultural statistics methodology with the Ministry of Agriculture and regional grain exchanges (bolsas) to improve crop production estimation.

Armenia

FY 2009: Staff assisted with the initial planning for collecting agricultural data with the Armenian Population Census and conducting an agricultural census following the population census.

FY 2010: Staff continued to assist with the preparation of the population and agricultural censuses, including how to establish an agricultural producer register from the results. NASS staff also assisted with the preparations for a food safety survey.

FY 2011: Staff assisted in the review of pilot population census results and continued to prepare for the agricultural census. Staff also helped start a food safety survey across the country.

FY 2012: Staff assisted in the review of the agricultural data collected from the population census and made preparations for the agricultural census.

FY 2013: Staff assisted in the development of a detailed plan of work and time schedule for the agricultural census. It included a plan to test the census questionnaire with rural agricultural households, data collection procedures and a public relations plan. Staff also assisted with the publication of agricultural information gathered in the population census.

FY 2014: Staff continues to assist with the development of the agricultural census currently scheduled for data collection in October 2014. Staff observed data collection of the Pilot Agricultural Census conducted in November 2013.

Bangladesh

FY 2012: NASS conducted an assessment of the capacity of the government for agricultural data collection and analysis in support of the Feed the Future program.

FY 2013: Staff worked with other U.S. government agencies and the government of Bangladesh to create a proposal of appropriate strategies to further develop a national system that produces reliable and timely agricultural Statistics. The system will align with the National Strategy for the Development of Statistics and the Global Strategy to Improve Agricultural and Rural Statistics.

FY 2014: Staff will work with other U.S. government agencies and the government of Bangladesh to implement the agreed upon strategies to develop a national system that produces reliable and timely agricultural Statistics. The system will align with the National Strategy for the Development of Statistics and the Global Strategy to Improve Agricultural and Rural Statistics.

Brazil

FY 2009: Two groups visited the United States for training on the survey methodology and procedures for objective yield surveys in general with specific application for citrus objective yield.

FY 2010: Staff from the Brazilian Institute of Geography and Statistics attended a NASS workshop preparing for the Agricultural Resource Management Survey and worked with NASS staff to design a similar survey in Brazil.

FY 2014: Staff plans to conduct an assessment of the capacity of Sao Paulo, Brazil to collect, analyze and disseminate citrus area and production estimates.

Georgia

FY 2009: NASS staff provided assistance to the Georgian Department of Statistics in the development of data collection quality control procedures. In addition, staff assisted in the analysis and summarization of Georgian quarterly agricultural survey and designed the sample for 2010. Staff from the Georgian Department of Statistics also traveled to the United States for training on survey methodology.

FY 2010: Staff assisted with the analysis and summarization of quarterly agricultural survey data. Staff helped develop interviewer training programs and training for regional offices within Georgia. NASS staff also helped conduct data users meetings to determine the data needs of both public and private data users in the country. Finally, NASS assisted in producing a supplemental survey on animal health practices.

FY 2011: NASS staff assisted in preparations for the 2011 quarterly agricultural surveys. Staff also assisted in the review and analysis of the animal health practices survey. In addition, staff helped conduct regional training on data collection and survey methodology.

FY 2012: NASS continued to provide technical assistance to improve the quarterly agricultural surveys by instituting new survey methodologies and quality control procedures. NASS is assisting with collection and processing of animal health data from a survey of farmers and a survey of veterinarians.

FY 2013: NASS staff continued the FY 2012 program of assistance. Technical assistance efforts by NASS included assisting GEOSTAT to prepare annual and quarterly statistical publications; assisting GEOSTAT to update the list of agricultural operators and select new samples of agricultural operators for 2013 surveys; and assisting GEOSTAT in the beginning preparations for conducting an agricultural census and population census in November 2014.

FY 2014: NASS will continue work to design and implement new agricultural surveys necessary to provide data for public and private sector users of

Georgian agricultural statistics including the MOA's unit for market outlook and agricultural policy analysis. NASS staff will continue to assist in preparations of the agricultural census planned for November 2014.

Ghana

FY 2011: NASS conducted an assessment of the capacity of the Government of Ghana for agricultural data collection and analysis in support of the Feed the Future program.

FY 2012: NASS visited appropriate officials and staff at the Ministry of Food and Agriculture and the Ghana Statistical Service to determine their priorities and identify collaborative activities for improving the timeliness and accuracy of the agricultural statistics they produce. This information formed the basis of a detailed plan for moving forward with an agricultural statistics improvement project.

Feed the Future

FY 2013: Staff continued to work with USAID to conduct agricultural statistics assessments in preparation for Feed the Future projects. An in-depth country assessment was conducted in Uganda.

FY 2014: Staff will continue to work with USAID to conduct in-depth country assessments in priority countries in Africa and Asia. Senegal, Malawi, Mozambique and Cambodia have been identified as priority countries.

Haiti

FY 2010: NASS staff conducted an initial assessment of the market information and agricultural statistics system in Haiti during August 2010.

FY 2011: Staff completed an assessment of the agricultural statistics system in Haiti that included the Ministry of Agriculture, Natural Resources and Rural Development, National Food Security Coordination Office, National Center for Geo Spatial Information, Food Security Network, and the Haitian Institute of Statistics and Computing. NASS hosted a study tour for selected representatives of organizations associated with agricultural statistics to establish a long-term capacity building program in Haiti.

FY 2012: NASS worked with Haitian officials to implement an agricultural statistics capacity building program. A pilot project to test methodology for an annual agricultural survey was implemented.

FY 2013: NASS assisted with training Haitian staff in the areas of data collection, editing, analysis, summarization and quality control procedures for agricultural surveys. This training resulted in conducting the first nationwide sample survey for crop production and livestock inventory.

FY 2014: NASS continued training Haitian staff in the areas of data editing, analysis, summarization and data dissemination for the first data release from the 2013 agricultural survey. Further training will continue in preparation for the 2014 crop production and livestock inventory survey cycles.

India

FY 2013: NASS staff met with counterparts in the Ministry of Agriculture and public and private research institutions to assess areas that are of highest importance for cooperation in agricultural statistics and market information.

FY 2014: NASS, along with other USDA agencies, continued its cooperative relationship with Indian counterparts and proposed training and study tours for improving agricultural statistics methodologies.

Indonesia

FY 2010: NASS staff conducted an extensive review of the agricultural statistics system of the Central Bureau of Statistics and provided recommendations for improvements.

Japan

FY 2014: NASS will host two statisticians from the Ministry of Agriculture, Forestry and Fisheries for two months. Training activities will focus on the contractual agreement NASS has with the National Association of State Departments of Agriculture (NASDA) to hire the enumerative staff for NASS surveys. The Japanese visitors will also receive training on general NASS survey and statistical methodology.

Madagascar

FY 2009: NASS organized and hosted a study tour for officials with the Directorate of Information Systems at the Malagasy Ministry of Agriculture, Livestock and Fisheries. The group learned about organization, methodology, and management of programs for preparing and disseminating official agricultural statistics, conducting economic analyses relative to production agriculture and agricultural markets, and developing marketing strategies. Further activities were suspended by the U.S. State Department because of political instability in Madagascar.

Moldova

FY 2011: NASS staff conducted an assessment of the Moldova National Bureau of Statistics, capacity to collect, analyze, and disseminate agricultural statistics. Recommendations were provided for developing the Moldova General Agricultural Census (GAC) questionnaire. The design of a list sampling frame from GAC respondents was initiated.

FY 2012: NASS assisted with the development of a regular agricultural survey program. The survey program will consist of other, smaller surveys that use the sampling frame generated from the GAC as a basis for the sample.

Mongolia

FY 2009: Staff worked with the National Statistics Office to design a sample to determine livestock mortality rates in pilot aimags (states) to be used to determine indemnity payments for an index-based livestock insurance program sponsored by the World Bank. Staff also summarized results of the survey.

FY 2010: Staff continued work with the National Statistics Office to design a sample to determine livestock mortality rates in pilot and operational aimags (states) to be used to determine indemnity payments for an index based livestock insurance program. Staff assisted the National Statistics Office's development of a summarization system.

FY 2011: Staff continued work with the National Statistics Office to design a sample to determine livestock mortality rates in pilot and operational aimags (states) to be used to determine indemnity payments for an index based livestock insurance program. The program covered over eighty percent of the country.

FY 2012: Staff continued to assist with implementation of the index-based livestock insurance program. The program was expanded to cover the entire country. The National Statistics Office has the capacity to design a sample, collect the required data and summarize the results to meet the needs of the livestock insurance program.

Mozambique

FY 2011: NASS conducted an assessment of the capacity of the government to collect and analyze agricultural data.

Nigeria

FY 2009: NASS staff conducted an initial assessment of Nigeria's agricultural statistics program. As a result, a team of agricultural statisticians from several organizations traveled to the United States for a study tour to learn about our agricultural statistics system. At the end of the tour, the group decided to request assistance to develop a pilot area sampling frame in one State.

FY 2010: NASS staff assisted geographic information systems personnel in developing the area sampling frame in Kaduna State. Staff also assisted in the development of a questionnaire and data collection methods for a pilot survey using the area sampling frame. Finally, staff assisted in the summarization of the data collected in the pilot survey.

FY 2011: Staff assisted with the evaluation of the area sampling frame based on the results of the pilot survey.

Pakistan

FY 2011: Staff conducted an initial assessment of the agricultural statistics capabilities within the Ministry of Food and Agriculture, Federal Bureau of Statistics, and the Punjab Province Crop Reporting Service to develop a capacity building program.

Russia

FY 2010: NASS staff provided training on survey methodology and sampling procedures to the Federal State Statistics Service of the Russian Federation as part of a project funded by the World Bank.

Rwanda

FY 2013: NASS staff conducted an assessment of the agricultural statistics capacity of the Government of Rwanda and prepared an initial plan to work with other donor organizations for capacity building for the agricultural statistics producing agencies in Rwanda.

FY 2014: NASS continues to negotiate the Statement of Work (SOW) which will form the basis of an agricultural statistics improvement plan for Rwanda.

Senegal

FY 2014: NASS staff conducted an in-depth country assessment of Senegal's agricultural statistics system. The assessment forms the basis for future capacity building activities.

Serbia

FY 2009: Working with the Ministry of Agriculture, Forestry and Water Management and the Statistics Office of the Republic of Serbia, NASS conducted an initial assessment of the agricultural statistics program. Serbia was planning to conduct its first agricultural census in more than 50 years and requested assistance preparing for the census. NASS led workshops on questionnaire design and data collection and a critique of the census of agriculture questionnaire.

FY 2010: NASS continued assistance in preparation for the agricultural census by conducting workshops to prepare a publicity plan, to train interviewers, and to design output tables for the results of the census.

FY 2011: The Ministry of Agriculture, Forestry and Water Management requested assistance in developing a database of information to be used to address ad hoc policy questions within the Ministry. NASS hosted a workshop on database concepts and usage in the United States for key users from the Ministry and provided technical assistance as the database was being planned.

FY 2012: NASS continued to provide technical advice and review as the database of information is loaded and queries are developed. Assistance was provided for agricultural census planning.

FY 2013: NASS staff finalized work with the Statistics Office of the Republic of Serbia (SORS) to design samples for crop and livestock production surveys based on the result of their Census of Agriculture. NASS also worked with SORS and the Ministry of Agriculture to jointly produce a crop progress and condition report throughout the growing season.

South Africa

FY 2011: NASS conducted an assessment of the capacity of the Government of South Africa to collect and analyze agricultural data.

Tanzania

FY 2011: NASS conducted an assessment of the capacity of the government to collect and analyze agricultural data in support of the Feed the Future program.

FY 2012: NASS conducted a statistical workshop and a more in-depth assessment of the capacity for agricultural data collection.

FY 2013: Staff worked with the Government of Tanzania to improve agricultural statistical capacity through the development of methodology and implementation of an Annual Agricultural Sample Survey (AASS) program. Steps included the development of an area sampling frame, survey methodology, and questionnaire for a cognitive pre-test survey.

FY 2014: The AASS was conducted by the Government of Tanzania with NASS technical assistance in two regions of the country. Ongoing work continues to provide statistical assistance and training to improve the capacity to collect and disseminate quality and timely agricultural

statistics countrywide. A pilot survey will further refine sampling, data collection, analysis and summary systems to be conducted in late 2014.

Funding for State Offices

Mr. Aderholt: Please update the chart provided in the fiscal year 2014 hearing record listing the funding for state offices for fiscal years 2009 through 2013 and estimates for fiscal years 2014 and 2015.

Response: Please see the table below for a geographic breakdown of obligations by location. The large shifts in funding, among and within a state over time, reflect the approved reorganization completed at the end of 2013.

[The information follows:]

NATIONAL AGRICULTURAL STATISTICS SERVICE
Geographic Breakdown of Obligations

Fiscal Year State/Territory	(Dollars in thousands)						
	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Estimate	2015 Estimate
Alabama.....	\$902	\$1,103	\$1,069	\$678	\$635	\$263	\$263
Alaska.....	201	225	177	170	171	302	302
Arizona.....	837	852	933	725	551	252	252
Arkansas.....	1,211	1,441	1,271	903	1,070	5,526	5,526
California.....	2,249	2,738	2,082	1,682	1,706	5,939	5,939
Colorado.....	1,250	1,313	1,270	1,333	2,006	5,558	5,558
Delaware.....	124	139	149	136	143	150	150
Florida.....	1,192	1,335	1,363	864	630	226	226
Georgia.....	1,313	1,365	1,288	694	1,706	5,812	5,812
Hawaii.....	775	955	836	631	652	218	218
Idaho.....	1,070	1,198	1,048	1,008	991	195	195
Illinois.....	1,441	1,412	1,305	1,136	658	304	304
Indiana.....	1,346	1,508	1,533	1,208	1,009	182	182
Iowa.....	1,284	1,438	1,413	1,022	1,371	5,819	5,819
Kansas.....	1,342	1,315	1,277	1,059	524	172	172
Kentucky.....	1,084	1,308	1,265	612	1,619	5,563	5,563
Louisiana.....	1,004	937	1,145	843	672	231	231
Maryland.....	899	915	906	635	372	319	319
Michigan.....	1,366	1,445	1,261	1,259	1,434	5,850	5,850
Minnesota.....	1,269	1,422	1,312	1,221	802	288	288
Mississippi.....	1,345	1,413	1,252	863	611	196	196
Missouri.....	1,096	1,140	6,661	9,805	9,677	8,989	8,989
Montana.....	845	1,032	1,180	871	821	202	202
Nebraska.....	1,340	1,313	1,307	1,236	1,704	5,558	5,558
Nevada.....	257	288	264	226	179	288	288
New Hampshire.....	1,117	1,162	1,206	1,087	770	179	179
New Jersey.....	939	957	999	780	677	318	318
New Mexico.....	733	821	801	650	590	237	237
New York.....	1,091	1,140	1,215	855	831	168	168
North Carolina.....	2,061	2,036	1,860	995	605	377	377
North Dakota.....	1,005	1,039	942	743	378	319	319
Ohio.....	1,428	1,600	1,484	895	701	223	223
Oklahoma.....	932	1,131	1,151	773	757	217	217
Oregon.....	1,094	1,225	1,058	906	387	181	181
Pennsylvania.....	1,077	1,207	1,056	672	1,391	6,085	6,085
South Carolina.....	870	974	977	827	664	222	222
South Dakota.....	1,179	1,232	1,365	899	764	305	305
Tennessee.....	992	1,026	1,295	1,168	889	379	379
Texas.....	1,969	2,310	1,847	1,434	2,239	6,164	6,164
Utah.....	728	816	759	712	728	210	210
Virginia.....	966	998	1,003	582	576	315	315
Washington.....	1,649	1,642	1,534	1,479	1,709	6,201	6,201
West Virginia.....	634	533	672	395	310	186	186
Wisconsin.....	1,459	1,538	1,529	1,307	1,006	227	227
Wyoming.....	651	810	906	478	565	199	199
District of Columbia	99,405	105,008	110,532	120,617	132,667	80,238	97,885
Puerto Rico.....	219	224	313	306	118	-	-
Obligations.....	149,239	158,974	168,068	169,384	181,036	161,352	178,999
Lapsing Balances.....	-	64	167	74	80	-	-
Bal. Available, EOY.....	5,037	8,043	205	370	146	-	-
Total, Available.....	154,276	167,081	168,440	169,828	181,262	161,352	178,999

NASS Special Surveys

Mr. Aderholt: Please provide a list and short description of any special surveys conducted in fiscal years 2011 through 2014 to date.

Response: Below is a year by year account of the special surveys conducted in FY 2011 - 2014 to date.

FY 2011:

The 2009 On-Farm Renewable Production Survey was the first on-farm renewable energy production survey conducted at the national level by NASS. The energy survey provided an inventory of farm-generated energy practices with detailed data associated with the category or type of energy produced (wind, solar, and manure/methane digester), installation cost, percent of cost from outside funding, year installed, and total amount of utility savings from use of on-farm renewable energy production. The On-Farm Renewable Energy publication was released to the public in February 2011.

NASS conducted an Ag Screener survey on a list of approximately 400,000 potential farms and ranches. This survey is part of the process for developing the most complete Census Mail List possible and is part of the base Census of Agriculture Program appropriation.

FY 2012:

As part of NASS ongoing process to improve the Census Mail List, NASS conducted the National Agricultural Classification Survey (NACS), a list-building survey used to assemble the census mailing list. The NACS was sent to potential farming operators with the intent of determining whether they meet the USDA farm definition. Those who meet the farm definition were included in the 2012 census. Activities included final preparation to conduct the Census of Agriculture data collection and processing in FY 2013, screening over 1 million potential farms and ranches to build the final Census Mail List, printing and assembling mail packets for a Census Mail List in excess of 3 million records, and an expanded June Agricultural Survey to determine the under-coverage of the Census Mail List.

FY 2013:

This is the production year for the 2012 Census of Agriculture. During this fiscal year NASS does not conduct any special surveys. However, this is a critical planning year for the first set of special surveys conducted as follow-on to the Census of Agriculture. Presently, NASS is making preparations to conduct the Farm and Ranch Irrigation Survey and the Census of Aquaculture in FY 2014. This includes content formulation, questionnaire design, population identification, programming and developing edit specifications, updating processing systems, developing data collection instruments, and organizing a marketing/public relations plan.

FY 2014:

The 2013 Census of Aquaculture is currently underway. A similar Special Study was last conducted for the 2005 growing year and provided a comprehensive picture of the aquaculture sector at the state and national level. This census collects detailed information relating to production methods, surface water acres and sources, productions, sales, point of first outlets, aquaculture distributed for restoration, conservation, or recreational purposes, and farm labor. Results are expected before the end of FY 2014.

The 2013 Farm and Ranch Irrigation Survey is currently underway. This Special Study has been conducted in 1979, 1984, 1988, 1994, 1998, 2003, and was last conducted for the 2008 growing year and provided one of the most complete and detailed profiles of irrigation in the United States. Examples of data summarized from this survey include: quantity of water usage, distribution methods, water sources, equipment and energy expenditures, and crops produced using irrigation. Results of this latest Special Study are expected to be released in October 2014.

The initial phase of a 2014 Census Special Study on land ownership is currently underway. The last survey of this type was conducted for calendar year 1999. This Special Study will provide data on land ownership characteristics and varying elements of farm financial characteristics such as value of farm land, expenses associated with owning or operating agricultural land, and debt.

NASS is currently implementing the Current Agricultural Industrial Reports (CAIR). These reports were formerly done by the U.S. Census Bureau, but were discontinued in 2011. The purpose of the CAIR program is to provide timely and accurate estimates of production and shipments of specific manufactured products for economic policy needs and for market analysis, forecasting, and decision making in the private sector. There are four reports:

- Fats and Oils: Production, Consumption, and Stocks
- Fats and Oils: Oilseed Crashings
- Flour Milling Products
- Consumption on the Cotton System and Stocks

NASS Pesticide Survey Expenditures

Mr. Aderholt: Please provide information on the NASS pesticide use survey. How much was spent on pesticide data collection in fiscal years 2009 through 2014 and what is estimated for fiscal year 2015?

Response: The National Agricultural Statistics Service (NASS) pesticide use is conducted on a reimbursable basis for the Agricultural Marketing Service (AMS). NASS assists in the development of sample designs, survey procedures, and estimation routines for AMS', Monitoring Program Office Pesticide Data Program.

[The information follows:]

		Dollars in Thousands					
		Actual	Actual	Actual	Actual	Actual	Estimate
		2009	2010	2011	2012	2013	2014
Pesticide							
Use Survey		\$30	\$40	\$40	\$35	\$30	\$20

NASS Fertilizer and Chemical Input Survey Expenditures

Mr. Aderholt: Please provide information on NASS fertilizer and chemical input surveys, including cost per year and frequency. How much was spent on these surveys in fiscal years 2009 through 2014 and what is estimated for 2015?

Response: In FY 2011, the National Agricultural Statistics Service (NASS) redesigned the chemical and fertilizer use program to continue, but with a reduced frequency. For FY 2014, funding was restored and the chemical and fertilizer program returned to full frequency. The fruit chemical use surveys were last performed in 2012 and will return to an every other year rotation, as long as full funding continues. The chemical and fertilizer use survey is also coordinated in conjunction with the Agricultural Resource Management Survey (ARMS) for row crops and other crops.

[The information follows:]

National Agricultural Statistics Service
(Dollars in thousands)

	Actual <u>2009</u>	Actual <u>2010</u>	Actual <u>2011</u>	Actual <u>2012</u>	Actual <u>2013</u>	Estimate <u>2014</u>	Estimate <u>2015</u>
Chemical Use Surveys							
Fruit	\$2,410	\$2,671	\$1,816	\$1,184	-	\$452	\$1,548
Post Harvest	3	1,468	-	-	-	-	-
Vegetables	37	4,062	1,650	-	-	-	490
Row Crops & Other	-	-	3,239	2,537	\$1,861	3,052	5,264
Total	2,450	8,201	6,705	3,721	1,861	3,504	7,302

NASS Organic Surveys

Mr. Aderholt: Please provide information on NASS organic surveys. How much was spent on these surveys in fiscal years 2009 through 2014 and what is estimated for 2015?

Response: The Farm Bill money received in FY 2009 was used to conduct a Census Special Study on organic production using information gathered from the 2007 Census of Agriculture.

NASS received \$1.5 million in FY 2010 from USDA Risk Management Agency (RMA) to plan, develop, and test an Organic pilot survey designed to capture production, price, and value of organic commodities in support of RMA's insurance program.

FY 2014 money will be used to publish a special report on organic agriculture production and practices utilizing data from the 2012 Census of Agriculture. A bulk of the money appropriated in 2014 will be used to establish a data series designed around a census of certifying agents. In FY 2014 \$2.25 million was appropriated to collect Organic data, NASS is planning on collecting data through 2017.

[The information follows:]

National Agricultural Statistics Service
(Dollars in thousands)

Organic Survey/Activity	2009	2010	2011	2012	2013	2014	2015
List Building & Maintenance	\$250	\$250	\$250	\$250	\$250	\$250	\$250
Organic Production Survey - 2008 Farm Bill	1,000						
Appropriated for Organic Certifiers Survey & Census Special Tabulation						2,250	
Organic Production Survey - 2014 Farm Bill							1,000
Total	1,250	250	250	250	250	2,500	1,250

Census of Agriculture Cyclical Costs

Mr. Aderholt: Please provide an update on the Agricultural Census and a full cycle accounting of costs.

Response: The 2012 Census of Agriculture was released on May 2, 2014. The Census of Agriculture is the leading source of facts and figures about American agriculture. Conducted every 5 years, the Census provides a detailed picture of U.S. farms and ranches and the people who operate them. It is the only source of uniform, comprehensive agricultural data for every State and county in the United States.

[The information follows:]

National Agricultural Statistics Service
Dollars in Thousands

Census of Agriculture	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	Total	FY 2015
	Enacted	Enacted	Enacted	Enacted	Enacted	Census Cycle	
Direction & Planning	\$7,700	\$7,400	\$6,800	\$7,790	\$9,514	39,204	\$8,566
Content Determination & Design	5,500	7,400	9,800	2,800	5,245	30,745	5,947
Mail List Development & Mailout	7,100	6,000	8,500	13,689	8,600	43,889	7,995
Collection and Processing	13,808	9,773	12,789	29,000	15,648	81,018	19,616
Publication & Dissemination	3,800	2,500	3,750	4,750	5,538	20,338	5,920
Total	37,908	33,073	41,639	58,029	44,545	215,194	48,044

Direction and Planning: This category includes planning, administration, and support for the Census of Agriculture, the annual Current Agricultural Industrial Reports, and the Quinquennial Special Studies. This category encompasses developing timelines, milestones, deliverables, and quality assurance checks associated with the Census Programs. Also included in here is collaboration with USDA, other Governmental, and private sector stakeholders to incorporate critical periodic and emerging data needs into the plan.

Covered by this category are research, evaluation and analysis activities during the entire five year census cycle. During the production year, NASS gathers critical information associated with the population composition, data collection and data processing. This information is used to guide NASS staff in making improvements in areas that lead to enhanced quality of census products, improved efficiency, and reduced respondent burden. Examples include evaluation of approximately 250,000 incoming calls from respondents through the Census Helpline, analysis of remarks captured from over 280,000 reports that came via the Internet reporting instrument and thousands of emails to our customer service unit.

Content Determination and Design: NASS evaluates and tests the questionnaires for all the components of the Census of Agriculture Program. New content solicited from internal and external stakeholders must be tested prior to production in order to ensure all the questions are interpreted correctly by the respondent. Also, cognitive interviews provide vital feedback to questionnaire content and design. The Quinquennial Census of Agriculture questionnaire is developed to facilitate NASS capability to survey specific sub-populations without the additional cost of screening for those populations. This category also includes the cost of printing the questionnaire for all program components.

The information gathered from research, evaluation, and analysis activities has a direct impact on question modification and improved questionnaire design. NASS uses metrics from the census edit system to determine frequency of edit and analyst changes to every item on the census form. This enables NASS to discern which questions need to be adjusted to more accurately collect data that leads to higher quality data products. During the data collection and processing year of the census cycle, efforts to improve the processes for the next cycle begin. A sample of records that have substantial reporting errors, such as the amount and distribution of farm or ranch land in the land section, is collected.

Research and analysis is then conducted to determine the cause of misreporting so that it can be reduced for the next census. During the 2012 census, approximately 250,000 COA survey respondents called the NASS Helpline. Information from these calls is captured and analyzed to determine which areas of the questionnaire are most troublesome. Text mining software is used to discern common problems. The results from both the reporting error study and the helpline information will be used to provide insight into content and design changes for the 2017 Census of Agriculture questionnaire.

NASS received approximately 280,000 responses from the internet website. Comments from these respondents were captured and will be used to help determine improvements to ease respondent burden and to provide a more user-friendly application. NASS also analyzes common reporting errors from internet collection to enrich the instrument for the 2017 Census of Agriculture.

Mail List Development and Mail Out: Because of the consistent activities necessary to develop a robust and proficient census mail list (CML) for the Census of Agriculture Program, and the similar list maintained for the Agricultural Estimates Program, NASS combines the two lists to more efficiently maintain one list that can be utilized for both programs as well as the NASS reimbursable program. The goal with the CML is to build as complete a list as possible of agricultural places that meet the NASS farm

definition. The CML compilation begins with the list used to define sampling populations for NASS surveys conducted for its annual agricultural estimates program.

NASS builds and improves the list on an ongoing basis by obtaining information from outside sources. These sources include lists from state and federal government agencies, producer associations, seed growers, pesticide applicators, veterinarians, marketing associations, and a variety of other agriculture related areas. NASS also obtains special commodity lists to address specific list deficiencies. These outside source lists are matched to the NASS list using record linkage programs. Most names on newly acquired lists are already on the NASS list. Records not on the NASS list are treated as potential farms until NASS can confirm their existence as a qualifying farm. Along with assembling and labeling the mail packets, postage costs for the mail collection of the Census of Agriculture, Current Agricultural Industrial Reports and Special Studies (follow-on surveys) are covered in this category.

Costs for activities involving the screening of millions of potential farms through the National Agricultural Classification Survey (census screener) are covered under this category. NASS conducts three iterations of this screening survey in the three years prior to census production. This is a more cost effective way for eliminating non-farm respondents with a four page screener rather than including them on the Census Mail List.

Collection and Processing: This category involves all activities associated with system development, programming, and data collection for the components of the Census of Agriculture Program. The completion of a Census of Agriculture with high coverage of qualifying farm operations is vital as it provides an up-to-date list frame. Activities encompassing processing, editing, and analysis are conducted on the Census of Agriculture returned mail packets. Additionally, outreach now includes Native American Indian, outlying areas, and small or disadvantaged farm operators. NASS outsources some of the data collection and processing in cooperative agreements with the National Association of State Departments of Agriculture and the Census Bureau's National Processing Center in Jeffersonville, Indiana.

Research on data collection techniques to improve response rates are subsumed in this category. NASS routinely conducts research on the effectiveness of various treatments to the selected survey population. Evaluating various correspondence materials and modes of delivery provides NASS with a better understanding of effective interaction with respondents while discovering less expensive and more efficient ways of gathering the critical data needed to inform policy decisions. Research continues to be conducted on the census dual-frame weighting methodology for under-coverage, non-response, and misclassification.

Publication and Dissemination: The Census of Agriculture base includes marketing, disseminating, and producing tangible and electronic products for external data users, USDA, and the public. NASS conducts publicity prior to and during data collection to encourage better response rates. Public relations and customer service are important external factors to encourage the continued willingness of farmers, ranchers, and agribusinesses to voluntarily provide information on which most of the NASS statistics are based.

Encompassed in this category is the work and activities surrounding the release of data from the components of the Census of Agriculture Program. This requires staff time for developing publication tables, creating summary and disclosure programs, and reviewing data and data products prior to release.

This category also comprises research into value-added data products and dissemination techniques that respond to data user needs and requests. As an example, NASS examined ways to improve the visual representation of census data which resulted in a new dynamic web-mapping product that will be made available in May 2014 for the 2012 Census of Agriculture data.

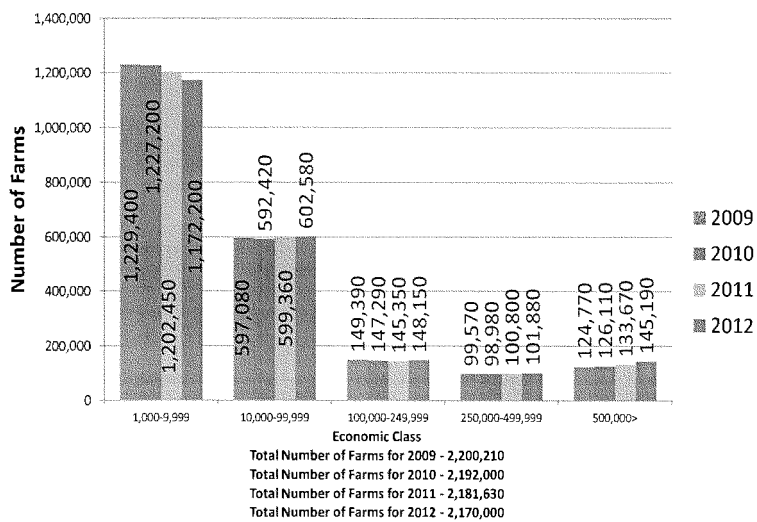
Farm Numbers and Land in Farms

Mr. Aderholt: Please provide a chart with the number of farms and ranches operating in the United States, acreage of land being farmed and ranches by category and total acreage for 2009 through 2013.

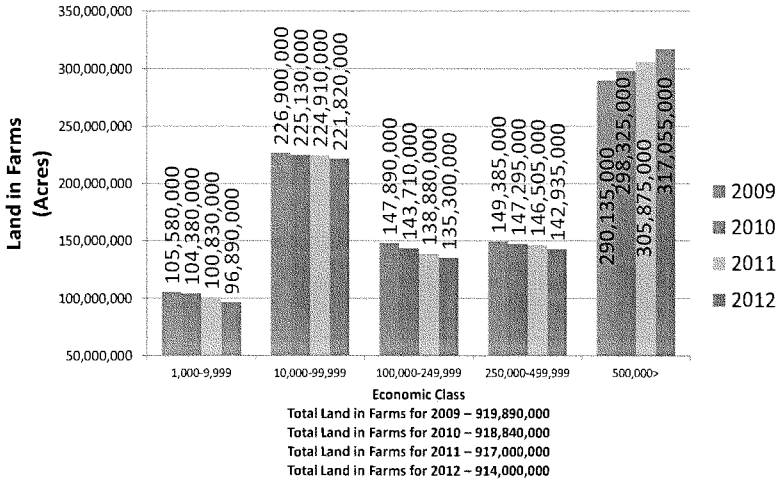
Response: NASS is awaiting the release of the 2012 Census of Agriculture results to set the 2013 farm numbers and land in farms estimates. Therefore, 2012 is the latest year that NASS has available for these estimates. Below are two charts that depict the information requested.

[The information follows:]

Number of Farms by Economic Sales Class, United States



Land in Farms by Economic Sales Class, United States



NASS Cost Saving Measures

Mr. Aderholt: Please describe the cost-saving measures the agency has adopted since fiscal year 2011.

Response: In February 2009, the National Agricultural Statistics Service embarked on a plan of multiple process improvement initiatives that redesigned how and where the organization conducted its business. The focus of the effort was to modernize infrastructure and staff training, centralize telephone data collection and processing activities, enhance remote data collection efforts, standardize estimation and dissemination practices, and develop a more robust research environment to position the organization for success into the future.

The organization has realized gains in efficiency from the initiatives and used this to manage necessary reductions in staff resources across the organization. Currently, the field structure in the organization has reduced from 46 field offices to 12 regional sites with minimal remote staff remaining in the additional 34 locations to interface with the local stakeholders and data collection staff. NASS has been in the process of drawing down space in the remaining 34 State Field Offices in FY 2013 and will continue through FY 2014. This effort, along with increasing space

utilization within the South Building facility will allow the organization to reduce our space requirement from 494,581 square feet in FY 2013 to 319,976 square feet by FY 2016. A large reduction occurred during FY 2013 in State owned space. There was a reduction of 75,057 square feet, or 85.1 percent of the initial 88,098 square feet. This reduction was afforded by the transition to a new, less paper dependent business model that allowed reorganization to 12 Regional Field Offices.

Accuracy of NASS Estimates

Mr. Aderholt: Every few months there seems to be an article questioning NASS forecasts and estimates, particularly for corn. The most recent article I saw states, "Many of the concerns about the forecasts and estimates since 2006 have centered on the accuracy of the quarterly USDA estimates of corn stocks." Please explain this issue. How serious are these concerns? Should the forecasting and estimating process be changed?

Response: NASS forecasts and estimates have always been subject to question by those who use the data. This happens primarily when the NASS results do not match what is expected. These expectations can be based on many factors. NASS provides the only unbiased estimates in the industry, based on the most comprehensive data sources available.

Since 2006, the most vocally questioned estimates have been the quarterly corn stocks estimates. In this same timeframe corn use has changed significantly due to the rapid growth in ethanol production.

NASS takes these and all concerns very seriously and evaluates all estimating programs on an ongoing basis to ensure that all processes and procedures are statistically reliable and utilize the best methods possible.

In 2013, the USDA Chief Economist commissioned an outside review of the program in question. This independent reviewer agreed that many in industry have raised concerns in recent years, but found no issues within the NASS programs that suggested the estimates are in error or needed to be changed.

NASS continues to provide the most comprehensive, unbiased estimates available within the agriculture industry. These estimates, though sometimes scrutinized, remain the "gold standard" against which all other estimates are measured. As new technologies emerge and various industries evolve, NASS will continue to adjust and adapt as necessary to maintain the best data available in service to U.S. agriculture.

Economic Research Service

SNAP, WIC, and Child Nutrition Programs

Mr. Aderholt: Please update the description provided in the fiscal year 2014 hearing record of the research ERS conducts related to SNAP, WIC and child nutrition programs, including funding, for fiscal years 2009 through 2013. Also describe ERS's plans for fiscal year 2015.

Response: The Economic Research Service (ERS) conducts economic research and analysis on the immediate and long-term consequences of

alternative policies and programs aimed at ensuring access by children and adults to safe and nutritious food. This research addresses factors that can improve the effectiveness and efficiency of the Nation's domestic nutrition assistance programs, including the SNAP, WIC, and the Child Nutrition Programs. Research findings are used by policy makers, program managers, and those shaping efforts to promote access to affordable and healthful food, especially by low-income households.

Extramural research leverages ERS's internal research expertise and draws upon the multidisciplinary expertise of outside researchers and the resources of institutions and universities across the country.

During fiscal years 2009 through 2014, ERS conducted internal research and funded extramural research in targeted, high-priority areas including: food assistance and children's well-being; food insecurity among households with working-age adults with disabilities, interactions between the "built environment" and food assistance; using behavioral economics and incentives to promote child nutrition; food assistance and the recession, and food access. During 2012 through 2015, ERS is partnering with the Census Bureau and the Food and Nutrition Service to make better use of SNAP and WIC program administrative data for research. ERS has established a memorandum of understanding with each agency to use administrative data to better understand the program participation decisions of eligible households, to study the characteristics of eligible nonparticipants, and to enhance national survey data by including measures of program participation. A new ERS report examines variation in the use of the Supplemental Nutrition Assistance Program (SNAP) among eligible people for selected demographic and geographic subgroups within a state for the very first time.

In 2014, a jointly sponsored study by ERS and the Food and Nutrition Service (FNS), which identified research gaps and opportunities to advance understanding of the causes and consequences of child hunger and food insecurity in the United States, was published by the National Academy of Science Committee on National Statistics. The report, *Research Opportunities Concerning the Causes and Consequences of Child Food Security and Hunger*, helps FNS fulfill a mandate from Section 141 of the Healthy, Hunger-Free Kids Act of 2010 to pursue a research program on this important topic, and sought ERS technical guidance on how best to move forward on the research gaps.

In 2014, ERS and FNS completed the first-ever census of farm to school activities in School Food Authorities (SFAs). The Farm to School Census is being used to establish a baseline measure of local food purchases in schools, and set priorities for USDA programming related to local school food sourcing. The Farm to School Census data is being used on the FNS website mapping SFAs that use local foods, and to characterize the geographic distribution of farm to school programs, and to obtain State-level estimates of the prevalence of local procurement among SFAs. These data will be used by FNS to set priorities for USDA outreach and technical support.

In 2014, ERS will strengthen its ability to conduct 21st century research that supports improving USDA policy effectiveness in a time of tight federal budgets. The initiative adopts two innovative strategies--the use of behavioral economics and the statistical use of administrative data--to address critical information gaps that hinder policy effectiveness. Through the initiative's support, ERS will expand internal expertise, support collaboration with USDA program agencies, and form partnerships with

extramural researchers to: (1) fund experiments that incorporate concepts from behavioral economics, identifying high (and low) performing options without the costs associated with new program implementation; and (2) create and evaluate unique merged administrative data systems by linking multiple sources, assessing statistical properties, and analyzing the merged data for policy-relevant research. Results of the initiative will provide science-based evidence that informs decision making by policy makers and program managers in the Congress, USDA, and across Federal and State governments. The initiative supports the priorities, goals and objectives of the Research, Education, and Economics (REE) 2012 Action Plan and the Office of Management and Budget's 2012 memorandum on the use of evidence and evaluation in the 2014 budget.

In fiscal year 2015, ERS research will continue to support the USDA's annual data collection on food security in the United States, examine how food choices and health outcomes are related to food assistance programs and community characteristics, and analyze key food assistance-related questions about food acquisition behavior using ERS's new Food Acquisition and Purchase Survey (FoodAPS). ERS has partnered with the University of Kentucky and University of Illinois to sponsor innovative research using the FOODAPS survey.

[The information follows:]

ERS activities related to Human Nutrition

	FY 2009 Enacted	FY 2010 Enacted	2011 Enacted	FY 2012 Enacted	FY 2013 Enacted	FY 2014 Estimate	FY 2015 Request
Extramural research (FANRP + RIDGE)	\$4,408,000	\$4,408,000	\$4,408,000	\$3,408,000	\$3,408,000	\$4,408,000	\$4,808,000
Intramural Human Nutrition Research	7,567,000	7,966,000	7,966,000	8,481,000	8,481,000	8,559,000	8,664,000
Data on food prices, purchases, and consumption	3,500,000	3,500,000	3,500,000	2,985,000	2,985,000	2,985,000	2,985,000
Total	\$15,475,000	\$15,874,000	\$15,874,000	\$14,874,000	\$14,874,000	\$15,952,000	\$16,457,000

SNAP and State Unemployment Insurance Programs

Mr. Aderholt: Please update the fiscal year 2014 hearing record regarding ERS's research effort using data from Supplemental Nutrition Assistance Program and data from state Unemployment Insurance programs to determine how the two programs work together to support families experiencing unemployment.

Response: ERS research examines operational issues concerning the U.S. Department of Agriculture's Supplemental Nutrition Assistance Program (SNAP) and its support for the working poor. In particular, the research addresses: (1) operational issues regarding SNAP participation decisions and the dynamics of program participation among low-income households with workers, and (2) the interactions between receipt of SNAP benefits and State Unemployment Insurance (UI) benefits. The project has received the cooperation and support of SNAP and employment agencies in eight States - California, Florida, Georgia, Illinois, Maryland, Michigan, Missouri, and Texas.

Information about the interactions between the two programs can identify potential "gaps" in coverage or utilization of SNAP. We know that about 30 percent of eligible households do not participate in SNAP. This research examines the extent to which UI exhaustees turn to SNAP as well as the number of months for which they receive no assistance from either safety-net program. These exhaustees may be an easily identifiable target group for SNAP outreach.

Preliminary analysis shows that the demographic characteristics of working-age SNAP entrants changed over the 2006-2009 timeframe. On average, new recipients increased significantly in older, white, and male populations of states. These changes were especially apparent among new SNAP recipients who received UI within three months of SNAP entry. These changes in characteristics suggest that SNAP began to serve a somewhat different population as the recession deepened.

A recent ERS report, Participation in the Supplemental Nutrition Assistance Program (SNAP) and Unemployment Insurance: How Tight Are the Strands of the Recessionary Safety Net?, found that an estimated 14.4 percent of SNAP households also received UI at some point in 2009 (a recessionary year)--nearly double the estimate of 7.8 percent in 2005 (a full-employment year). During a recession, households with *tight labor market connections* (their members have work histories and earnings sufficient to meet UI-eligibility requirements upon unemployment) become a larger component of the SNAP caseload, increasing the overall share of SNAP households that also receive UI.

Cost-Saving Measures

Mr. Aderholt: Please describe the cost-saving measures the agency has adopted since fiscal year 2011.

Response: Since fiscal year 2011, ERS has taken a number of measures to reduce both direct costs and overhead. For example, ERS instituted a

telework program in which 57 percent of ERS employees currently have core telework agreements. ERS garners savings in both transit subsidies and utility costs as a result of its extensive telework participation.

In FY 2012, ERS made available Voluntary Early Retirement Authority (VERA) and Voluntary Separation Incentive Payment (VSIP) opportunities to its employees, resulting in reduced payroll expenditures.

In the IT arena, ERS transitioned 77 standalone servers to 7 virtualized servers, realizing an annual savings in both operations and staff costs. In addition, ERS replaced its extranet hosting contracts with Sharepoint Services, resulting in annual cost savings with no impact on the ability of research teams to share files and documents.

ERS has reduced travel costs by use of web conferences and webinars. Use of teleconferencing has expanded the reach of ERS' research dissemination activities by allowing more staff to participate in meetings and conferences with customers and stakeholders.

As a cost-saving measure in FY 2012, ERS stopped production of print copies of its magazine, *Amber Waves*, and continued its production as an electronic-only publication. ERS also instituted a new product, "Chart of the Day," in which subscribers to the service receive an e-mail each workday highlighting charts of interest from ERS research, including a brief description, links to source material, and the ability to "like" it on their Facebook page. ERS has repurposed content in a customer-friendly format aimed at extending the Agency's work to new audiences, especially through social media.

Validation of Services

Mr. Aderholt: Please describe ERS's plan to contract with a third party to conduct an independent verification and validation of services.

Response: ERS underwent a tri-annual certification and accreditation by an external contractor for an Authority to Operate (ATO) its information systems in accordance with the Federal Information Security Management Act (FISMA), which appears as Title III of the E-Government Act of 2002. The tri-annual certification was completed in April 2013. The accreditation process evaluated information technology (IT) systems against specific documented security requirements, verified the existence of acceptable levels of security controls, summarized residual risks, and involved senior management, system owners, and authorizing officials in the security lifecycle of ERS' IT system. After reviewing the results of the security assessment of the LAN/WAN System and its constituent system-level components, and the supporting evidence provided in the associated security accreditation package, it was determined that the risk to agency operations, agency assets, or individuals resulting from the operation of the information system is acceptable. Accordingly, an authorization to operate the information system in its existing operating environment was granted. The information system was accredited without any significant restrictions or limitations. This security accreditation constitutes a formal declaration that adequate security controls have been implemented in the information system and that a

satisfactory level of security is present in the system. The authority to operate will expire on December 18, 2015.

Obesity Rates and Food Consumption Patterns

Mr. Aderholt: Please describe ERS's work relating to obesity rates and food consumption patterns.

Response: Meals, snacks, and beverages purchased at fast-food restaurants are a large and growing portion of a typical American's budget, and have been blamed for American's expanding waistlines and poor diet quality. Previous studies have attributed this increase to many factors, such as budget and time constraints, demographic and health characteristics, and market-level forces, but no study has been able to rigorously address the effects of all of these variables on the demand for fast foods. Ongoing ERS research uses the 2003-2011 American Time Use Survey to identify associations between fast-food purchases and individual, household, and market characteristics.

A second line of research examines the impact of agricultural policies on obesity rates. Many observers speculate that agricultural policies contribute to increased U.S. obesity rates by making certain farm commodities more abundant and therefore cheaper. They claim that farm program subsidies that lower prices for corn and wheat result in greater consumption of fattening foods and growing waistlines. ERS research (conducted jointly with colleagues at the University of California at Davis, and Cornell University) found that the effects of farm subsidies, when combined with the effects of other agricultural policies that restrict supply such as acreage set-asides or import barriers, have little impact on the amount of calories consumed by an average American adults and thus a negligible influence on dietary patterns and obesity.

The high obesity rates and poor diet quality in the United States, particularly among low income populations, are often attributed to low income, low food access, and high food prices of healthy foods. ERS examined these issues and found four major results. First, on average, Americans consume diets that need improvement and there is only a very limited relationship between income and diet quality. Second, the way the food price is measured makes a difference in the perception of how expensive healthy and less healthy food is. Third, the way Americans allocate their food budgets between healthy and less healthy foods is not in line with healthy diets. Fourth, at any food spending level there are households that purchase healthy (and unhealthy) diets, including budgets at or below the maximum allotment for the Supplemental Nutrition Assistance Program (SNAP). The key finding is that healthy foods and diets are affordable. Nutrition education efforts, along with applications of behavioral economics research findings related to food choices may be fruitful approaches to improving food-related health outcomes.

A separate ERS study examined food prices and children's Body Mass Index (BMI). On average, higher-priced less healthy food is associated with lower BMIs, and lower priced healthy food is associated with lower BMI. All effects are generally small, but the results indicate that the effect on BMI of subsidizing healthy food may be just as large as raising prices of less healthy foods.

Another line of research investigated the impacts of potentially implementing a tax on sugar sweetened beverages (i.e., a "soda tax"). One ERS study found that a 20percent soda tax is predicted to cut calorie consumption by 34-47 calories among adults and by 40-51 calories among children. The obesity rate among adults dropped from 66.92percent to 64.34percent within a year, and further reduced to 62.73percent in year 3 and very little reduction after that. A reduction in childhood obesity is predicted due to lack of a dynamic calories and body weight model for children. A separate study investigated the impact of a tax on salty snacks. This study found that a 10percent tax on salty snacks will cut down consumption by 5.5 ounces and calories by 830 kilocalories per year.

Research is also being conducted on the consumption of food away from home (FAFH) both by adults and children. One ERS study found that one additional away-from-home meal increased calorie consumption by an average of 134 calories among adults, and the impact was larger for obese adults than for healthy weight adults (240 calories vs. 90). In another study, after separating out the effect of sodas, the effect of FAFH on calories was not significant among children aged 6-12, but did lower measures of diet quality; for children 13-18 years old, each FAFH meal added 108 calories and lowered daily diet quality.

REE-35

Mr. Aderholt: Please provide the most recent information on the use of the Internet by farmers. If possible, provide a breakdown by percent for DSL, high-speed, cable, or other service providers.

Response: Farm internet use has spread and the percent of farms online is similar to the country's households, but the means of internet access reflects the generally rural location of the farms. Only 5 percent of farms with internet access use dial-up service provision. DSL continues to be the largest plurality of technology used for broadband access, unlike cable technologies that are much more commonly used in urban areas and are generally perceived as providing higher speeds with greater reliability than other systems. Based on the most recent data available (2013) the general farm internet breakdown is provided for the record as follows:

70 percent of all farms have computers
 67 percent of all farms have internet access
 16 percent purchase ag inputs over the internet
 14 percent conduct marketing activities over the internet

[The information follows:]

Table: Technology used as farms' primary means of internet access

Access Type	Percent of farms with internet access
Dial-up	5
DSL	36
Cable	13
Satellite	17
Wireless	25
Other	4

U.S. Alfalfa Market

Mr. Aderholt: Please provide a short description of the U.S. alfalfa market, including production, use, exports and imports. How has the market changed over the past 10 years?

Response: In the past decade, alfalfa production in the U.S. has generally declined, from a high of 75.6 million short tons in 2004 to the recent low of 52.0 million, experienced during the drought of 2012. In 2013, production rebounded slightly to 57.6 million short tons; however, this figure is still approximately 10 million tons less than the 10 year average production volume of 67.6 million short tons (2004-2013). Harvests in 2013 are at least two million tons lower, compared to the 2004 base year, in Iowa (down 3.1 million), Minnesota (down 2.3 million), Nebraska (down 2.2 million), Virginia (2.1 million), and Washington (down 2.0 million). Over the same span of time, Texas, Kansas, and California have seen production reduced by more than one million tons. Only North Dakota, South Dakota and Utah have significantly increased average alfalfa production (by more than 1 million tons each) when compared to the 2004 base year.

During the recent periods of drought, particularly in the West and Central regions of the U.S., demand for alfalfa and other hay from beef cattle producers increased, putting upward pressure on alfalfa prices. Record high prices for alfalfa and other hay were estimated in 2012. High corn prices supported continued feeding of alfalfa (and other hay) in beef and dairy cattle rations, particularly in 2012 and 2013. As corn prices declined, alfalfa demand, and subsequently prices, has fallen, (but still remain quite high and reflective of tight supplies. The 2013/14 marketing year price for alfalfa is \$197 per short ton, which compares to the 10-year average price (unadjusted) of \$146 per short ton and the average of \$98.6 that farmers received in 2004.

Domestic prices have been supported by growing demand for U.S. alfalfa products in export markets. In just the last 6 years (2008-2013), total demand for U.S. alfalfa hay in export markets has increased by 115 percent, from 919 thousand metric tons in 2008, to close to 2 million metric tons in 2013. The recent increase in demand is primarily attributable to growth in exports to the United Arab Emirates (UAE) and China. In 2008, these two

countries accounted for about 14 percent of total volume exports; in 2013 combined demand from the UAE and China represented 63 percent of total U.S. alfalfa hay exports. U.S. imports of alfalfa hay and products (bales and cubes) have increased significantly in the last three years in concert with reduced domestic production. In 2008, approximately 131 thousand metric tons of alfalfa and products were imported to the U.S.; and in 2013 nearly 1.6 million tons were imported. On average, close to 75 percent of all alfalfa products are produced in Canada.

Agricultural Research Service

Research Projects Terminated

Mr. Aderholt: Please update the list from the fiscal year 2014 hearing record of all research projects terminated in fiscal years 2010 through 2013.

Response: There were six research projects terminated in FY 2010 for a total of \$2,764,000. Those projects were as follows:

[The information follows:]

State	City	Project Title	Amount
Alabama	Auburn	Vaccines and Microbe Control for Fish Health	\$991,000
Florida	Gainesville	Vector-Borne Diseases	205,000
Headquarters		Animal Health Consortium	820,000
Mississippi	Stoneville	West Tennessee Mississippi River Cropping Systems Unit (Jackson, Tennessee worksite)	254,000
Pennsylvania	Wyndmoor	Arbuscular Mycorrhizal Fungi	42,000
Texas	Bushland	Sorghum Research	452,000

In FY 2011, 46 research projects were terminated for a total of \$41,889,000. Those projects were as follows:

State	City	Project Title	Amount
Alabama	Auburn	Catfish Genome	\$819,000
Alabama	Auburn	Improved Crop Production Practices	1,293,000
Arkansas	Booneville	Center for Agroforestry	660,000
Arkansas	Booneville	Dale Bumpers Small Farms Research Center	1,805,000
Arkansas	Booneville	Endophyte Research	994,000
Arkansas	Little Rock	Sorghum Research	135,000
Arkansas	Stuttgart	Aquaculture Fisheries Center	519,000
Arkansas	Stuttgart	Aquaculture Initiatives, Harbor Branch Oceanographic Institute	1,597,000
California	Brawley	Water Management Research Laboratory	340,000
District of Columbia	Washington	Medicinal and Bioactive Crops	111,000
Florida	Brooksville	Subtropical Beef Germplasm	1,033,000
Florida	Gainesville	Mosquito Trapping Research/West Nile Virus	1,454,000
Georgia	Dawson	Water Use Reduction	1,200,000

State	City	Project Title	Amount
Hawaii	Hilo	Pacific Basin Agricultural Research Center Staffing	700,000
Hawaii	Hilo	Tropical Aquaculture Feeds	1,438,000
Headquarters		Biotechnology Research and Development Corporation	3,500,000
Headquarters		Human Nutrition Research (Kannapolis, North Carolina)	1,000,000
Headquarters		Lyme Disease 4 Poster Project	700,000
Headquarters		National Corn to Ethanol Research Pilot Plant	360,000
Headquarters		Northwest Center for Small Fruits	275,000
Illinois	Peoria	Crop Production and Food Processing	786,000
		Arthropod-Borne Animal Diseases Research Laboratory	
Kansas	Manhattan		1,500,000
Kansas	Manhattan	National Bio and Agro-Defense Facility	1,500,000
Louisiana	New Orleans	Diet Nutrition and Obesity Research	623,000
		Formosan Subterranean Termites Research	
Louisiana	New Orleans		3,490,000
Louisiana	New Orleans	Phytoestrogen Research	1,750,000
Louisiana	New Orleans	Termite Species in Hawaii	200,000
Maryland	Beltsville	Biomedical Materials in Plants	1,700,000
Maryland	Beltsville	Bioremediation Research	111,000
Maryland	Beltsville	Foundry Sand By-Products Utilization	638,000
Maryland	Beltsville	National Center for Agricultural Law	654,000
Maryland	Beltsville	Potato Diseases Research	61,000
Maryland	Beltsville	Poultry Diseases Research	408,000
Massachusetts	Boston	Human Nutrition Research	350,000
Minnesota	St. Paul	Cereal Disease Research	290,000
Minnesota	St. Paul	Soybean Genomics	200,000
Minnesota	St. Paul	Wild Rice	303,000
		Seismic and Acoustic Technologies in Soils Sedimentation Laboratory	
Mississippi	Oxford		332,000
New York	Greenport	Animal Vaccines	1,518,000
		Northern Great Plains Research Laboratory	
North Dakota	Mandan		543,000
	University Park	Livestock-Crop Rotation Management	
Pennsylvania			349,000
South Dakota	Brookings	Biomass Crop Production	1,250,000
Texas	Houston	Human Nutrition Research	300,000
		Forage Crop Stress Tolerance and Virus Disease Management	
Washington	Prosser		200,000
West Virginia	Kearneysville	Computer Vision Engineer	400,000
Wisconsin	Madison	Dairy Forage Research Center	2,500,000

In FY 2012, 27 research projects, for a total of \$38,583,000 were terminated due to location closures. Those projects were as follows:

State	City	Project Title	Amount
Alaska	Fairbanks	Arctic and Subarctic Plant Genetic Resources Conservation, Research, and Information Management	\$1,048,000
Alaska	Fairbanks	Integrated Pest Management for High Latitude Agriculture	2,642,000
Alaska	Fairbanks	Alaska Fish Processing Byproducts	2,382,000
California	Shafter	Integrated Management of Cotton Pests: Plant Genetics, Biological Control, and Novel Methods of Pest Estimation	1,617,000
Florida	Brooksville	Optimizing Forage-Based Cow-Calf Operations to Improve Sustainability of Beef Cattle Agriculture and Water	610,000
Florida	Brooksville	Identification and Utilization of Mechanisms Responsible for the Adaptation of Cattle to Stressors of the Subtropics	779,000
Georgia	Watkinsville	Soil Organic Matter and Nutrient Cycling to Sustain Agriculture in the Southeastern USA (worksite of Athens, Georgia)	597,000
Georgia	Watkinsville	Survival and Transport of Pathogens from Animal Production Systems within Landscapes of the Southeastern USA(worksite of Athens, Georgia)	579,000
Georgia	Watkinsville	Improving Crop and Animal Production Systems for Southern Producers(worksite of Athens, Georgia)	1,779,000
Louisiana	New Orleans	Termites: Biology, Risk Assessment and Surveillance of Invasive Species	2,019,000
Louisiana	New Orleans	Termites: Chemical and Biological Control for Integrated Pest Management of Invasive Species	1,168,000
Ohio	Coshocton	Effectiveness of Watershed Land-Management Practices to Improve Water Quality	1,390,000
Oklahoma	Lane	Organic and Reduced Input Fresh Market Specialty Crop Production Systems for the Southern Great Plains	834,000
Oklahoma	Lane	Physiological and Genetic Basis of Postharvest Quality, Disease Control, and Phytonutrient Content of Watermelons	1,346,000
South Carolina	Clemson	Enhanced Cotton Quality through Measurement and Processing Research	2,618,000
Texas	Weslaco	Development of Quarantine Alternatives for Subtropical Fruit and Vegetable Pests	1,660,000
Texas	Weslaco	Enhancement of Postharvest Quality of Fruits and Vegetables and Evaluation of Commodity Treatments of Quarantined Pests	532,000
Texas	Weslaco	Field Trials to Develop Data on Crop Protection Chemicals for Vegetable and Specialty Crops	181,000
Texas	Weslaco	Using Remote Sensing and GIS for Detecting and Mapping Invasive Weeds in Riparian and Wetland Ecosystems	1,194,000
Texas	Weslaco	Integrated Water, Nutrient and Pest Management Strategies for Subtropical Crops	2,115,000
Texas	Weslaco	Biological Control Strategies for Invasive Weeds of Southwestern U.S. Watersheds	1,099,000

State	City	Project Title	Amount
Texas	Weslaco	IPM Strategies for Managing Pests of Subtropical Row Crops	829,000
Texas	Weslaco	Biological Control of Invasive Pests of Orchard and Vegetable Crops in the Subtropical South	1,369,000
West Virginia	Beaver	Constructing Soils for Sustainable Agricultural, Recreational, and Developed Environments	1,780,000
West Virginia	Beaver	Economic Pasture-Based Beef Systems for Appalachia	2,173,000
West Virginia	Beaver	Forage Management Systems for Small-Scale Ruminant Production in the Appalachian Region	2,517,000
West Virginia	Beaver	Non-Traditional Plant Resources for Grazing Ruminants in Appalachia	1,726,000

In FY 2013, no research projects were terminated.

Extramural Activities Terminated

Mr. Aderholt: Please update the list from the fiscal year 2014 hearing record of all extramural activities terminated in fiscal years 2010 through 2013.

Response: One extramural agreement was terminated in FY 2010. This agreement was a specific cooperative agreement with the Biotechnology Research and Development Center in the amount of \$738,000 funded from the Animal Health Consortium at Headquarters. Twenty-two research projects were terminated in FY 2011 that included extramural research. Four research projects that included extramural research were terminated in FY 2012 due to location closures. In FY 2013, no extramural research was terminated, however, the level of funding for extramural activities was substantially reduced due to the impact of rescissions and the sequester. Extramural agreements associated with the FY 2011-2012 research projects and location closures are provided for the record.

[The information follows:]

EXTRAMURAL ACTIVITIES TERMINATED IN FY 2011

Research Title	Cooperator	Extramural Amount
Animal Vaccines, Greenport, NY	UNIV. OF CT	\$486,296
	UNIV. OF MO	486,295
Aquaculture Fisheries Center, Stuttgart, AR	UNIV. OF AR, PINE BLUFF	341,470
Aquaculture Initiatives, Harbor Branch Oceanographic Institute, Stuttgart, AR	FLORIDA ATLANTIC UNIV., HARBOR BRANCH	436,710
Biomass Crop Production, Brookings, SD	SD STATE UNIV	277,577
	MBI INTERNATIONAL	203,000
Biotechnology Research and Development Center, Headquarters	BRDC	3,150,000
Crop Production and Food Processing, Peoria, IL	UNIV. OF IL	148,717
	PURDUE UNIV.	148,717
Center for Agroforestry, Booneville, AR, and Dale Bumpers Small Farms Research Center, Booneville, AR	UNIV. OF MO	1,550,000
Diet Nutrition and Obesity Research, New Orleans, LA	LOUISIANA STATE UNIV.	253,499
Endophyte Research, Booneville, AR	UNIV. OF AR	263,770
	UNIV. OF MO	268,675
	OR STATE UNIV.	268,675

EXTRAMURAL ACTIVITIES TERMINATED IN FY 2011

Research Title	Cooperator	Extramural Amount
Formosan Subterranean Termites Research, New Orleans, LA	NO MOSQUITO/TERMITE BRD	325,074
	UNIV. OF HI	131,136
	LOUISIANA STATE UNIV.	1,361,940
	UNIV. OF MS	50,000
	UNIV. OF FL	131,136
	TEXAS A&M UNIV.	131,136
	LOUISIANA STATE UNIV.	150,000
	THE AUDUBON INSTITUTE	151,136
	LOUISIANA STATE UNIV.	50,000
Improved Crop Production Practices, Auburn, AL	ALABAMA A&M	34,341
	AUBURN UNIV.	528,700
	TUSKEGEE UNIV.	34,341
Lyme Disease, 4 Poster Project, Headquarters	YALE UNIV.	565,853
Mosquito Trapping Research/West Nile Virus, Gainesville, FL	CT AG. EXPT. STATION	604,300
National Bio and Agro Defense Facility, Manhattan, KS	KANSAS STATE UNIVERSITY	400,000
National Center for Agricultural Law, NAL, Beltsville, MD	UNIV. OF AR (School of Law)	576,828
National Corn to Ethanol Research Pilot Plant, Headquarters	SOUTHERN ILLINOIS UNIV.	312,195
Northern Great Plains Research Laboratory, Mandan, ND	ND STATE UNIV. - HETTINGER	50,000
Phytoestrogen Research, New Orleans, LA	TULANE UNIV.	634,907
	UNIV. OF TOLEDO	482,207
Termite Species in Hawaii, New Orleans, LA	UNIV. OF HI	175,500
Tropical Aquaculture Feeds (Oceanic Institute), Hilo, HI	OCEANIC INSTITUTE	921,171
	UNIV. OF MN, NORTH CENTRAL RESEARCH & OUTREACH CENTER	155,000
Wild Rice, St. Paul, MN		
TOTAL		16,240,302

EXTRAMURAL ACTIVITIES TERMINATED IN FY 2012

Research Title	Cooperator	Extramural
		Amount
Appalachian Pasture Beef System, Beaver, WV	CLEMSON UNIV.	\$160,548
	WV UNIV.	534,797
	VA POLY INSTI & STATE U.	534,797
Aquaculture - Alaska/Seafood Waste, Fairbanks, AK	UNIV. OF AK	895,643
Seasonal Grazing, Coshocton, OH	OHIO STATE UNIV.	3,000
Virus-Free Potato Germplasm, Palmer, AK (worksite of Fairbanks)	UNIV. OF AK	250,000
TOTAL		2,378,785

New Research Projects

Mr. Aderholt: Please update the list from the fiscal year 2014 hearing record of all research projects started in fiscal years 2010 through 2013. Also describe new projects proposed for fiscal year 2015.

Response: There were ten research projects started in FY 2010, which were subsequently terminated in FY 2011 in accordance with additional continuing appropriations amendments contained in Public Law 112-6. Those projects were: Arthropod-Borne Animal Diseases Research Laboratory (\$1,500,000 at Manhattan, Kansas); Computer Vision Engineer (\$400,000 at Kearneysville, West Virginia); Dairy Forage Research Center (\$2,500,000 at the Marshfield, Wisconsin worksite of Madison, Wisconsin); Forage Crop Stress Tolerance and Virus Disease Management (\$200,000 at Prosser, Washington); Human Nutrition Research, Kannapolis, North Carolina (\$1,000,000 at Headquarters); Livestock-Crop Rotation Management (\$349,000 at University Park, Pennsylvania); National Bio and Agro Defense Facility (\$1,500,000 at Manhattan, Kansas); Pacific Basin Agricultural Research Center Staffing (\$700,000 at Hilo, Hawaii); Soybean Genomics (\$200,000 at St. Paul, Minnesota); and Subtropical Beef Germplasm (\$1,033,000 at Brooksville, Florida). No new research projects were started in FY 2011 or FY 2012. In FY 2013, one new project was started at the National Agricultural Library, Data Stewardship Program for Environmental and Sustainability Science (\$1,384,415).

The fiscal year 2015 budget includes a request for additional funding for the following high priority program initiatives: Climate Resilient Land, Crop, Grazing, and Livestock Production Systems; Advanced Crop and Livestock Genetic Improvements and Translational Breeding for Enhanced Food Production; and Pollinator Health and Colony Collapse Disorder.

Active Extramural Programs

Mr. Aderholt: Please provide a list of all extramural programs and projects that were active in fiscal year 2013. Were any extramural programs or projects started in fiscal year 2014?

Response: A list of all active extramural projects in FY 2013 are provided for the record. A list of all extramural projects and funding started in fiscal year 2014 cannot be provided until after the close of the fiscal year.

[The information follows:]

Cooperator	Extramural Total
AFRICAN INSECT SCI FOOD HEALTH	\$25,000
AGFORLIFE, LLC-LATINOS IN AGRIC	7,500
AGRICULTURE CANADA	64,941
AKWESASNE TASK FORCE/ENVIRONMENT	500
ALCORN STATE UNIVERSITY	50,000
AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (AAAS)	10,000
AMERICAN ASSOCIATION OF BOTANICAL GARDENS & ABORETA	35,000
AMERICAN BEEKEEPER FEDERATION	50,000
AMERICAN HONEY PROD ASSC	50,000
AMERICAN INSTITUTES FOR RESEARCH	25,000
AMERICAN SOCIETY FOR NUTRITION	90,000
AMERICAN WATER RESOURCE ASSOC	5,000
ARKANSAS CHILDREN'S HOSPITAL	6,676,000
ARKANSAS STATE UNIVERSITY	55,487
ASSOCIATION OF OILSEED AND WHEAT PRODUCERS	16,000
ATATURK UNIVERSITY	2,500
ATIP - CENTER FOR INNOVATION	22,000
AUBURN UNIVERSITY	110,713
BAYLOR COLLEGE OF MEDICINE	10,338,000
BEEET SUGAR DEV FOUNDATION	102,225
BIOTECH & BIOLOG CONTROL AGENCY	307,500
BLUE LEGACY INTERNATIONAL	78,000
BOWIE STATE UNIVERSITY	15,000
BOYCE THOMPSON INSTITUTE	484,570
CAMARA PARAGUAYA DE EXPORTADORES Y COMERCIALIZADORES DE CEREALES Y OLEAGINOSAS (CAPECO)	17,000
CARRINGTON AGRIC EXPT STATION	42,843
CENTRAL LAKES COLLEGE	7,175
CENTRO AGRONOMICO TROPICAL DE INVESTIGACION Y ENSEANZA	30,000
CHINESE ACADEMY OF AGRI SCIENCES	52,000
CLEMSON UNIVERSITY	99,976
COLD SPRING HARBOR LABORATORY	192,673
COLORADO DEPART OF AGRICULTURE	393,025

Cooperator	Extramural Total
COLORADO STATE UNIVERSITY	367,896
COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION (CSIRO)	459,311
CORNELL UNIVERSITY	1,521,991
COTTON INCORPORATED	89,895
COUNCIL FOR AGRIC SCI & TECH	20,000
CRYSTAL RIVER	20,000
DEKALB COUNTY SOIL & WATER CONSERVATION DISTRICT	61,000
DELTA HEALTH ALLIANCE	106,134
DESERT RESEARCH INSTITUTE	45,056
DUKE UNIVERSITY	87,634
EMPRESA BRASILEIRA DE PESQUISA AGROPECUARIA/BRAZILIAN ENTERPRISE FOR AGRICULTURAL RESEARCH (EMBRAPA)	7,000
FLORIDA AGRI & MECH UNIVERSITY	22,500
FLORIDA INTERNATIONAL UNIVERSITY	109,000
FOOD AND NUTRITION BOARD	10,000
FOUNDATION FOR THE STUDY OF INVASIVE SPECIES (FUEDEI)	779,749
FUNDACAO PAU BRASIL (FUNPAB)	20,000
GEISINGER CENTER	156,305
GRAND FORKS PARK DISTRICT	16,200
GREEN MOUNTAIN ANTIBODIES	5,000
GREENDELTA GMBH	67,670
HAWAII AGRIC RESEARCH CENTER	295,104
INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE (IICA)	3,000
INSTITUTO NACIONAL DE INVESTIGACION Y TECNOLOGIA AGRARUA (INIA)	47,350
INSTITUTO DE CULTIVOS TROPICALES	45,000
INSTITUTO MEXICANO TECNOLOGIA DEL AGUA	20,000
INSTITUTO NACIONAL AUTÓNOMO DE INVESTIGACIONES AGROPECUARIAS (INIAP)	10,000
INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE	30,000
INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER (CIMMYT)	58,423
INTERNATIONAL SCIENCE & TECHNOLOGY CENTER	5,000
IOWA STATE UNIVERSITY	47,007
KANSAS STATE UNIVERSITY	1,226,945
LOUISIANA STATE UNIV. AG. CENTER	52,648
LOUISIANA STATE UNIVERSITY	309,335
MALPAI BORDERLANDS GROUP	1,000
MARYLAND DEPT OF AGRICULTURE	15,000
METHYL BROMIDE ALTERNATIVE OUTREACH	20,000
MICHAEL FIELDS AGRICULTURAL INST	141,510
MICHIGAN STATE UNIVERSITY	751,360

Cooperator	Extramural Total
MIDDLE TENNESSEE STATE UNIV	18,869
MINOR IN AG, NAT RES RELT SCI	5,000
MISSISSIPPI AGRI & FORESTRY EXP STATION	4,116,735
MISSISSIPPI STATE UNIVERSITY	2,695,752
MISSOURI BOTANICAL GARDEN	50,600
N. CENTRAL MS RES CONS DEVEL COUNC	4,325
NATIONAL ACADEMY OF SCIENCES	20,000
NATIONAL CNTR FOR GENOME RESOURC	708,775
NATIONAL COTTON COUNCIL	269,500
NATIONAL TAIWAN UNIVERSITY	116,000
NEW MEXICO STATE UNIVERSITY	268,176
NORTH CAROLINA AG RES SERV (NCARS)	24,343
NORTH CAROLINA STATE UNIVERSITY	207,996
NORTH DAKOTA STATE UNIVERSITY	1,980,983
NORTHERN ILLINOIS UNIVERSITY	15,000
NW CALIFORNIA RESOURCE CONSERVATION & DEVEL. COUNCIL	40,896
OHIO STATE UNIVERSITY	590,837
OKLAHOMA STATE UNIVERSITY	370,586
OKLAHOMA WATER RESOURCES BOARD	1,108
OREGON DEPT. OF AGRICULTURE	47,500
OREGON STATE UNIVERSITY	986,608
PAN AMERICAN UNIVERSITY	1,500
PEERBOLT CROP MANAGEMENT	34,795
PENNSYLVANIA STATE UNIVERSITY	83,045
POLLINATOR PARTNERSHIP	10,000
PURDUE UNIVERSITY	1,695,613
ROYAL BOTANIC GARDENS	20,000
RUTGERS UNIVERSITY	290,456
SAGARPA-SENASICA	60,000
SEOUL NATIONAL UNIVERSITY	14,000
SMITHSONIAN INSTITUTION, OFFICE OF SPONSORED PROJECTS	50,000
SOUTH DAKOTA STATE UNIVERSITY	203,461
STEVE KALTENHEUSER	11,250
TEL AVIV UNIVERSITY	12,000
TENNESSEE STATE UNIVERSITY	236,552
TENNESSEE TECHNOLOGICAL UNIV	9,737
TEXAS A&M UNIVERSITY	205,175
TEXAS AGRILIFE RES & EXT CNTR	677,880
TEXAS TECH UNIVERSITY	185,331
THE CONSERVATION FUND	1,419,764
THE UNIVERSITY OF SCRANTON	18,001
THURGOOD MARSHALL COLLEGE FUND	5,000
TUFTS UNIVERSITY	8,779,602

Cooperator	Extramural Total
U.S. CIVILIAN RES & DEVEL FNDTN	105,000
UNIV CO. MACQUARIE RESEARCH LTD.	50,000
UNIVERSITY OF ARIZONA	120,000
UNIVERSITY OF ARKANSAS	450,520
UNIVERSITY OF BUFFALO (SUNY)	9,737
UNIVERSITY OF CALIFORNIA	2,590,204
UNIVERSITY OF CAMBRIDGE	17,236
UNIVERSITY OF CONNECTICUT	281,367
UNIVERSITY OF DELAWARE	21,587
UNIVERSITY OF FLORIDA	597,809
UNIVERSITY OF GEORGIA	93,177
UNIVERSITY OF HAWAII	1,842,858
UNIVERSITY OF IDAHO	630,677
UNIVERSITY OF ILLINOIS	413,959
UNIVERSITY OF IOWA	60,000
UNIVERSITY OF KENTUCKY	887,681
UNIVERSITY LOUISIANA @ LAFAYETTE	5,000
UNIVERSITY OF LOUISIANA - MONROE	11,685
UNIVERSITY OF LOUISVILLE	65,000
UNIVERSITY OF MAINE	16,500
UNIVERSITY OF MARYLAND	2,526,043
UNIVERSITY OF MASSACHUSETTS	45,407
UNIVERSITY OF MINNESOTA	854,619
UNIVERSITY OF MISSISSIPPI	3,795,020
UNIVERSITY OF MISSOURI	359,342
UNIVERSITY OF NEBRASKA	343,284
UNIVERSITY OF NORTH DAKOTA	1,785,000
UNIVERSITY OF NORTH TEXAS	62,314
UNIVERSITY OF PUERTO RICO (MAYAGUEZ)	26,935
UNIVERSITY OF READING	135,126
UNIVERSITY OF RHODE ISLAND	40,896
UNIVERSITY OF SAO PAULO	9,700
UNIVERSITY OF TENNESSEE	359,122
UNIVERSITY OF TOLEDO	220,000
UNIVERSITY OF WASHINGTON	197,452
UNIVERSITY OF WEST INDIES	20,000
UNIVERSITY OF WISCONSIN	923,955
UTAH STATE U. SPACE DYNAMICS LAB	150,000
UTAH STATE UNIVERSITY	13,077
VIRGINIA POLY INST & STATE UNIV	519,168
WASHINGTON STATE UNIVERSITY	605,472
WEED SCIENCE SOCIETY OF AMERICA	90,000
WEST TEXAS A&M UNIVERSITY	148,086

Cooperator	Extramural Total
WEST VIRGINIA STATE UNIVERSITY	15,000
WEST VIRGINIA UNIVERSITY	308,000
WESTERN KENTUCKY UNIVERSITY	709,991
WORLD FOOD PRIZE FOUNDATION	30,000
YUNNAN ACADEMY OF AGRI SCI	25,000
TOTAL	75,657,408

Cooperative Agreements with State Institutions

Mr. Aderholt: Please provide a list of cooperative agreements with state institutions, including funding, for fiscal years 2009 through 2013 and estimated for 2014 and 2015.

Response: There were five cooperative agreements with state institutions for each year in FY 2009 and FY 2010; and four cooperative agreements with state institutions for each year in FY 2011, FY 2012, and FY 2013. No new cooperative agreements have been proposed for FYs 2014 and 2015, and funding estimates are not yet available.

{The information follows:}

Cooperative Agreements with State Institutions

<u>Institution</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>
Arizona Cotton Research & Protection Council (Tempe, Arizona)	\$53,303	\$53,271	\$30,000	\$5,994	--
Colorado Department of Agriculture (Palisade, Colorado)	--	--	--	--	\$393,025
Connecticut Agricultural Experiment Station (New Haven, Connecticut)	748,568	833,568	198,048	126,242	--
Maryland Department of Agriculture (Annapolis, Maryland)	--	--	8,218	10,190	15,000
Milwaukee Public Museum (Milwaukee, Wisconsin)	90,000	60,500	--	--	--
New Orleans Mosquito & Termite Control Board (New Orleans, Louisiana)	350,074	325,074	--	--	--
Oklahoma Water Resources Board (Oklahoma City, Oklahoma)	45,450	78,100	78,000	46,072	1,108
Oregon Department of Agriculture (Salem, Oregon)	--	--	--	--	47,500

ARS Facility Maintenance

Mr. Aderholt: Please update the fiscal year 2014 hearing record regarding the total amount needed to address maintenance needs. What are the top ten highest priorities?

Response: A vendor contracted by ARS to review facility conditions inspected a sample of representative buildings from thirty-six ARS locations (roughly 55 percent of the total inventory) between November 2005 and May 2010 and used parametric models to estimate deferred maintenance for the remaining building inventory. Total deferred maintenance for ARS buildings is \$290 million. This list does not include new and replacement facilities or projects awaiting full funding. Deferred maintenance is defined as the amount necessary to ensure that a construction asset is restored to a condition substantially equivalent to the originally intended and designed capacity, efficiency, or capability. The current deferred maintenance amount is currently under its annual review and revision. The top ten projects that address health, safety, and critical infrastructure issues at facilities that support high priority research are provided for the record.
[The information follows:]

Facility/Project	City, State	Cost In Millions
Foreign Disease Weed Science Research Laboratory, Replace Mechanical and Electrical Systems and Skin of Containment Greenhouses	Frederick, MD	\$3.0
Richard B. Russell Research Center, Replace the main chiller and boilers and piping systems and replace the HVAC system on one floor with one that complies with current standards.	Athens, GA	16.2
United States National Arboretum, Repair and Replace Domestic Waterlines	Washington, DC	5.4
Beltsville Agricultural Research Center, Repair and Replace Steam and Condensate Distribution Piping	Beltsville, MD	10.9
United States Meat Animal Research Center, Major Electrical Infrastructure Modernization	Clay Center, NE	3.8
Beltsville Agricultural Research Center, Upgrade Electrical Substation	Beltsville, MD	6.5
National Agricultural Library, Replace Fire Alarm System	Beltsville, MD	2.3
United States National Arboretum, Repair and Replace Sanitary Lines	Washington, DC	8.2
Red River Valley Agricultural Research Center, Laboratory Modernization	Fargo, ND	4.2
Fruit and Tree Nut Research Unit, Replace HVAC System	Byron, GA	2.0
Total		62.5

ARS Southeast Poultry Research Laboratory

Mr. Aderholt: Please provide a description of the proposal to provide \$155 million to design and construct the Southeast Poultry Research Laboratory.

Response: The Southeast Poultry Research Laboratory (SEPRL) in Athens, Georgia, is the major facility in USDA and the Nation, for conducting research on exotic and emerging poultry diseases, including Avian Influenza and velogenic Newcastle disease. SEPRL's current poultry research facilities are inadequate for addressing highly virulent poultry diseases that require increased biocontainment capabilities and state-of-the-art facilities. SEPRL has Biosafety Level (BSL)-2 Laboratory and BSL-3 Ag facilities that were constructed in 1964 and 1976. Also, these facilities (34 small, inefficient buildings) no longer meet SEPRL's expanded research needs. The buildings which were designed for four scientists and their support staff currently serve twelve scientists and their support staff. Some critical, cutting edge research is not being conducted because of facility limitations. A new facility is required to continue efforts to protect our poultry industries from new and emerging influenza viruses and emerging/exotic poultry diseases which threaten the Nation's poultry industry and potentially U.S. public health. The new facility will provide state-of-the-art laboratories and necessary biocontainment capabilities needed to continue this critical research.

The Opportunity, Growth, and Security Initiative request fully funds the construction of the laboratory. Construction will be completed in three phases to allow the facility to continue to operate throughout construction. After all construction is complete, the laboratory will have 21 buildings with a total 149,000 Gross Square Feet (GSF), 112,000 GSF in eleven new facilities and 37,000 GSF in ten renovated facilities.

If funding for this critical project is made available by Congress in 2015, design for all three phases will be awarded in fiscal year 2015 and is estimated at \$10 million. Phase 1 construction will be awarded in fiscal year 2016 and consists of demolishing approximately 1,600 GSF in six buildings, constructing approximately 82,000 GSF of BSL-3 Ag facilities, BSL-2 laboratory facilities, administration facilities, production facilities, ancillary buildings (feed storage, waste treatment, incinerator, general storage etc.), and preparing the site with utilities and civil work for the new buildings. Phase 1 is estimated at \$95.0 million. Phase 2 construction will be awarded in fiscal year 2016 and consists of demolishing approximately 30,000 GSF in seventeen buildings and two trailers, and constructing 30,000 GSF of BSL-2 animal and production facilities. Phase 2 is estimated at \$31.0 million. Phase 3 construction will be awarded in fiscal year 2016 and consists of demolishing a 2,800 GSF waste treatment facility, modernizing 37,000 GSF in 10 existing buildings, and finalizing site work and roadways. Phase 3 is estimated at \$19.0 million.

ARS Aircraft

Mr. Aderholt: Please update the committee on the number and type of aircraft currently owned and leased by ARS.

Response: The Agricultural Research Service owns five aircraft and leases one aircraft. One of the owned aircraft is non-operational and is used

for parts. The five owned aircraft are physically located in Bryan, Texas, for use by the ARS location in College Station, Texas. The leased aircraft is used in Stoneville, Mississippi. The information is provided for the record.

[The information follows:]

1979 Cessna Aircraft Company 188C, Tail Number: N2182J
 1996 Air Tractor 402B, Tail Number: N38HT
 1998 McDonnell Douglas Aircraft MD-600N N605BP
 1978 Cessna Aircraft Company TU206G, Tail Number: N756NN
 1998 McDonnell Douglas Aircraft MD-600N N604BP (non-operational)
 1990 Air Tractor 402-15AS, Tail Number: N45196

National Arboretum

Mr. Aderholt: Please update the information provided in the fiscal year 2014 hearing record regarding the budget for the National Arboretum for fiscal years 2009 through 2013 and estimated for 2014 and 2015.

Response: The ARS budget for the National Arboretum is as follows: fiscal year 2009 was \$11,498,000; fiscal year 2010 was \$11,535,000; fiscal year 2011 was \$11,413,000; fiscal year 2012 was \$11,413,000; fiscal year 2013 was \$10,533,000; fiscal year 2014 is estimated at \$11,413,000; and fiscal year 2015 is estimated at \$11,413,000.

National Agricultural Library (NAL)

Mr. Aderholt: Please update the information provided in the fiscal year 2014 hearing record regarding the budget for the National Agricultural Library for fiscal years 2009 through 2013 and estimated for 2014 and 2015.

Response: The budget for the National Agricultural Library is as follows: fiscal year 2009 was \$22,697,000; fiscal year 2010 was \$23,088,000; fiscal year 2011 was \$22,195,000; fiscal year 2012 was \$21,772,000; fiscal year 2013 was \$21,478,000; fiscal year 2014 is estimated at \$24,752,000; and fiscal year 2015 is estimated at \$24,752,000. Totals include funding for Repair and Maintenance.

Aflatoxin

Mr. Aderholt: Please provide a summary of ARS research on aflatoxin, including funding, major projects, recipients and location of recipients, for fiscal years 2009 through 2014. Also describe ARS's plan for fiscal year 2015.

Response: ARS conducts aflatoxin research in Maricopa, Arizona; Albany, California; Dawson and Tifton, Georgia; Peoria, Illinois; New Orleans, Louisiana; Mississippi State, Mississippi; and Stoneville, Mississippi. Research focuses on developing detection and characterization technologies for *Aspergillus* strains and their related toxins, reducing aflatoxin levels by biological control, using gene silencing technologies to block aflatoxin biosynthesis, and using plant breeding to develop genetic resistance. Progress in maize alone in 2012-2014 includes:

- Identification of over 100 possible candidate genes that may be associated with *A. flavus* and aflatoxin resistance in maize; ARS researchers are currently running a pathway analysis to better understand the common networks and mechanisms in which these genes may be working. ARS researchers are also working to validate the genes in independent genetic backgrounds.
- Markers for each of the genes have been created and will allow breeders to select for the positive allele of each gene in their own germplasm, one at a time or via genomic selection using all candidate genes identified.
- Resistant breeding lines and cultivars have been shared between different institutes and testcrosses have been made between these new resistant lines and lines adapted to each targeted growing area.
- Phenotyping of testcrosses has been completed for at least one location and year; this information will be used (along with more years and locations) to create synthetic maize populations and new hybrids resistant to *A. flavus* and aflatoxin.

In 2015, research will: (1) continue to emphasize the use of non-toxicogenic strains of fungi and yeast for biological control. Biological control is the leading tool for prevention of aflatoxin contamination of maize, peanut, cottonseed, and pistachio in commercial agriculture in the United States. The results of the proposed work will support development of optimized and expanded biological control methodologies in the United States and in Africa and in so doing provide the opportunity to reduce both aflatoxin related food losses, increasing food security, and reduce the costs of aflatoxin management; (2) continue identifying and developing natural products to inhibit the fungi that promote, produce, or degrade aflatoxins; (3) build understanding of the phylogenetics of aflatoxin production through an examination of the population dynamics of aflatoxigenic and non-toxicogenic species in mixed culture; (4) use genomics to determine the molecular and biological changes that occur upon *Aspergillus* infection and the abiotics factors that influence infection; (5) identify and combine genetic components that control aflatoxin activities such as mechanical or biochemical impedance of pathogen invasion, biochemical interference with biosynthesis, and other mechanisms that result in reduced peanut aflatoxin; (6) conduct genome-wide characterization of genetic differences among diverse germplasm for traits that can contribute to reduced peanut aflatoxin; (7) develop RNA interference technology to silence *Aspergillus flavus* and *Aspergillus parasiticus* aflatoxin synthesis genes, thus preventing accumulation of these mycotoxins in peanut; (8) continue to develop plant germplasm with resistance to aflatoxin accumulation along with identifying DNA markers to accelerate genetic selection; and (9) determine if genes identified in association with genetic mapping studies in maize are differentially expressed in resistant lines.

ARS research activity related to aflatoxin funding in fiscal year 2009 was \$14,223,000; fiscal year 2010 was \$14,498,000; fiscal year 2011 was \$14,615,000; fiscal year 2012 was \$14,615,000; fiscal year 2013 was \$13,625,000; fiscal year 2014 is estimated at \$14,775,000; and fiscal year 2015 is estimated at \$14,775,000.

Office of Pest Management Policy

Mr. Aderholt: Please update the committee on staffing and expenditures for the Office of Pest Management Policy for fiscal years 2009 through 2014. What are the plans for the office for fiscal year 2015?

Response: Funding for the USDA Office of Pest Management Policy (OPMP) is as follows: fiscal year 2009 was \$1,686,000; fiscal year 2010 was \$1,712,000; fiscal year 2011 and 2012 was \$1,647,000; fiscal year 2013 was \$1,455,000; fiscal year 2014 is estimated at \$1,515,000; and fiscal year 2015 is estimated at \$1,515,000. Salary and expenses for nine staff were supported with this level of funding. No additional funds from the USDA Advisory Committee on Biotechnology and 21st Century Agriculture which receives staff support from OPMP were allocated as the committee did not meet. Specific needs for fiscal year 2015 will be covered by continued salary and expenses support. OPMP continues to work with the Environmental Protection Agency (EPA), USDA agencies, National Marine Fisheries Service, Fish & Wildlife Service, numerous other Federal agencies, and agricultural producers to ensure the development and use of high-quality agricultural information and data for pesticide risk assessment and risk mitigation, and for threatened and endangered species biological opinions. OPMP continues to represent and support the interests of growers for USDA at the Meeting of the Parties of the Montreal Protocol and related meetings. Methyl bromide, an important and effective fumigant is being phased out under this treaty; however, growers may request the use where there are no technical or economically feasible alternatives to this fumigant. Additional challenges have surfaced as approved alternatives have been removed or been proposed to be removed from the market, leaving U.S. agriculture vulnerable without an adequate fumigant. OPMP is providing leadership in conjunction with EPA and important USDA partners on issues related to the decline in managed honey bee health, which is gaining national attention as more studies related to issues are published. In 2014, OPMP will coordinate a Bee Forage and Nutrition Summit for USDA. OPMP provides leadership related to the issue of resistance and, in 2014, will support the 2nd Summit on Weed Resistance. OPMP, in conjunction with the four USDA Integrated Pest Management Centers, also works with growers to develop and implement plans to transition to more effective and lower-risk pest management tactics. This effort has become increasingly important as EPA continues its implementation of the Food Quality Protection Act through pesticide registration review which includes the Endangered Species Act consultation provision. In addition, OPMP is responsible for the interagency coordination, stakeholder outreach, and planning and development for the National Plant Disease Recovery System required by Homeland Security Presidential Directive #9. OPMP is also the technical lead for comments by USDA agencies for inter-agency review requests from EPA and the State Department for numerous toxic substances related to agriculture. For example, in 2013 and 2014, OPMP provided leadership for USDA in reviewing EPA's proposed Worker Protection Standards with regard to pesticides.

Germplasm Enhancement of Maize - GEM

Mr. Aderholt: Please provide a summary of the Germplasm Enhancement of Maize project, including funding, partners, purposes, and accomplishments and the plan for fiscal year 2015.

Response: The Germplasm Enhancement of Maize (GEM) project is an ARS partnership with public-sector and private-industry researchers that has the

primary purpose of developing commercially competitive maize hybrids containing exotic germplasm. Under this cooperative effort, seed companies cross their proprietary maize lines with promising exotic sources and send the resulting hybrids to public-sector and industry researchers to test and breed for disease resistance, tolerance to environmental extremes, product quality, and yield.

In addition to ARS, GEM Project partners (termed "cooperators") currently include 28 U.S. private-sector seed or crop breeding companies, 13 U.S. land-grant universities, one U.S. non-governmental organization (NGO), nine international private-sector seed or crop breeding companies, and five international public-sector cooperators.

The purpose of the GEM Project is to broaden the genetic base of the United States' maize crop. Maize hybrids in the U.S. have a very narrow genetic base, and are derived from just a few inbred lines, leaving them vulnerable to pests, diseases, and weather damage, which in turn might constitute a risk to food security. The narrow germplasm base also might limit the ability to increase nutritional and end-product quality—such as protein and oil content and starch properties—through genetic enhancement. Maize breeders want a broader genetic base, but adapting exotic strains to U.S. conditions is slow and costly. GEM meets the needs of U.S. maize producers by facilitating the integration of exotic material through cooperative public and private sector research.

The GEM Project's accomplishments include identifying maize lines with unique starch, protein, and oil properties; drought stress-tolerance; disease and insect resistance; and outstanding silage productivity. Overall, this new germplasm might contribute to the development of new commercial hybrids with more diverse genetic resistance to diseases and pests, as well as other valuable new traits. GEM lines with superior performance are formally released (265 lines-to-date) and distributed freely by ARS to maize researchers worldwide. GEM cooperators from private companies already use GEM germplasm in their proprietary breeding programs. Recently, the GEM Project has incorporated an even broader spectrum of maize genetic diversity into its breeding efforts. It also has applied doubled haploid technology to develop inbred lines much more rapidly, and to incorporate new sources of host-plant resistance to diseases into breeding stock. Previously released GEM inbred lines have been intercrossed, and the resulting new breeding populations have yielded new, derived lines with enhanced field performance and breeding value.

For FY 2015, the GEM Project will continue the preceding maize germplasm enhancement research and training efforts to the extent that funding levels permit. Specific activities will include identification of new, non-U.S. germplasm sources of potentially valuable genes for maize genetic improvement; conducting yield trials, field evaluations for agronomic merit, host-plant resistance to major maize diseases, and tolerance to environmental stresses; and development of new breeding crosses and lines via traditional approaches and doubled haploid technology. The training of 13 doctoral and 5 master's degree students partially supported by the GEM Project will continue.

ARS research activity related to the GEM Project funding in fiscal year 2009 was \$1,562,000; fiscal year 2010 was \$1,588,000; fiscal year 2011 was \$1,585,000; fiscal year 2012 was \$1,585,000; fiscal year 2013 was \$1,473,000;

fiscal year 2014 is estimated at \$1,673,000; and fiscal year 2015 is estimated at \$1,673,000.

ARS Senior Executive Staff

Mr. Aderholt: Please provide information on the positions held by and location of the agency's SES staff.

Response: ARS currently has 38 Senior Executive Staff (SES). Three of these positions are in Albany, California (Area Director, Associate Area Director, and Center Director). One position is in Davis, California (Center Director). Two positions are in Fort Collins, Colorado (Area Director and Associate Area Director). Five positions are in Washington, D.C. (Administrator, Associate Administrator for Research Operations, Deputy Administrator for Administrative and Financial Management, Director of the Office of Pest Management Policy, and Director of the U.S. National Arboretum). Two positions are in Athens, Georgia (Area Director and Associate Area Director). Three positions are in Peoria, Illinois (Area Director, Associate Area Director, and Center Director). One position is in New Orleans, Louisiana (Center Director). Fourteen positions are in Beltsville, Maryland (Associate Administrator for National Programs, Area Director, Associate Area Director, Associate Deputy Administrator for Administrative and Financial Management, Chief Financial Officer, Chief Information Officer, four Deputy Administrators, Director of the Office of Technology Transfer, Director of the National Agricultural Library, Center Director, and Associate Center Director). One position is in Stoneville, Mississippi (Area Director). One position is in Clay Center, Nebraska (Center Director). Three positions are in Wyndmoor, Pennsylvania (Area Director, Associate Area Director, and Center Director). Two positions are in College Station, Texas (Area Director and Associate Area Director).

Senior Executive Staff at ARS Laboratories and Facilities

Mr. Aderholt: Are any of ARS's laboratories and/or facilities headed by SES staff? If so, please provide the facility and location.

Response: Several of the larger ARS laboratories and facilities are currently headed by SES personnel. These laboratories/facilities are as follows: Eastern Regional Research Center, Wyndmoor, PA; National Center for Agricultural Utilization Research, Peoria, IL; Southern Regional Research Center, New Orleans, LA; U.S. Meat Animal Research Center, Clay Center, NE; Western Human Nutrition Center, Davis, CA; and the Western Regional Research Center, Albany, CA. In addition, the Beltsville Agricultural Research Center is headed by an SES Center Director and an Associate Center Director. The National Agricultural Library and the U.S. National Arboretum are also headed by SES personnel.

National Institute of Food and Agriculture

Hatch Act

Mr. Aderholt: Please update the chart provided in fiscal year 2014 hearing record showing the allocation of Hatch Act funding per university for fiscal years 2010 through 2014 (estimate). Include the number of personnel

supported by the funding for the most recent year the information is available.

Response: Recipients of Hatch Act funds have the flexibility to distribute funds among research projects, infrastructure, and personnel as they wish to meet the needs of their university. The distribution of these dollars varies from state to state. Fiscal year 2014 data is being collected now. Please see below. The latest data on personnel supported with Hatch Act funds as reported in the Current Research Information System (CRIS) by recipient institutions is for fiscal year 2012.

[The information follows:]

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014 a/
Auburn University	\$4,554,000	\$5,019,000	\$5,018,000	\$4,627,000	
University of Alaska	1,245,000	1,245,000	1,243,000	1,144,000	
American Samoa Community College	824,000	906,000	904,000	832,000	
University of Arizona	2,231,000	2,478,000	2,473,000	2,280,000	
University of Arkansas	3,850,000	4,236,000	4,229,000	3,911,000	
University of California	5,998,000	6,739,000	6,721,000	6,186,000	
Colorado State University	3,058,000	3,403,000	3,397,000	3,146,000	
University of Connecticut	886,000	966,000	964,000	898,000	
University of Connecticut Storrs	1,144,000	1,251,000	1,248,000	1,165,000	
University of Delaware	1,461,000	1,608,000	1,605,000	1,487,000	
University of District of Columbia	798,000	888,000	886,000	810,000	
University of Florida	3,435,000	3,913,000	3,913,000	3,585,000	
University of Georgia	5,483,000	6,014,000	6,006,000	5,579,000	
University of Guam	977,000	1,079,000	1,077,000	991,000	
University of Hawaii	1,459,000	1,605,000	1,603,000	1,486,000	
University of Idaho	2,423,000	2,691,000	2,686,000	2,469,000	
University of Illinois	6,216,000	6,906,000	6,796,000	6,308,000	
Purdue University	5,678,000	6,268,000	6,258,000	5,764,000	
Iowa State University	6,872,000	7,627,000	7,597,000	7,061,000	
Kansas State University	3,900,000	4,319,000	4,312,000	3,968,000	
University of Kentucky	5,734,000	6,498,000	6,492,000	5,994,000	
Louisiana State University	3,539,000	3,874,000	3,868,000	3,594,000	
University of Maine	2,111,000	2,345,000	2,340,000	2,149,000	
University of Maryland	2,765,000	3,038,000	3,032,000	2,811,000	

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014 a/
University of Massachusetts	2,446,000	2,666,000	2,661,000	2,487,000	
Michigan State University	5,839,000	6,442,000	6,437,000	5,930,000	
College of Micronesia	858,000	949,000	948,000	796,000	
University of Minnesota	5,670,000	6,277,000	6,267,000	5,760,000	
Mississippi State University	4,462,000	4,870,000	4,863,000	4,529,000	
University of Missouri	5,455,000	6,061,000	6,051,000	5,541,000	
Montana State University	2,430,000	2,707,000	2,702,000	2,479,000	
University of Nebraska	3,829,000	4,239,000	4,232,000	3,900,000	
University of Nevada	1,383,000	1,529,000	1,527,000	1,409,000	
University of New Hampshire	1,654,000	1,833,000	1,829,000	1,682,000	
Rutgers University	3,048,000	3,288,000	3,332,000	3,120,000	
New Mexico State University	1,852,000	2,052,000	2,049,000	1,885,000	
Cornell University	5,113,000	5,686,000	5,676,000	5,265,000	
Cornell University, Geneva	1,096,000	1,195,000	1,201,000	1,142,000	
North Carolina State University	7,551,000	7,908,000	7,912,000	7,346,000	
North Dakota State University	2,683,000	2,948,000	2,942,000	2,730,000	
Northern Marianas College	788,000	869,000	867,000	867,000	
Ohio State	6,759,000	7,487,000	7,475,000	6,863,000	
Oklahoma State University	3,597,000	4,008,000	4,002,000	3,656,000	
Oregon State University	3,320,000	3,708,000	3,701,000	3,390,000	
Pennsylvania State University	6,861,000	7,518,000	7,505,000	6,962,000	
University of Puerto Rico	4,151,000	4,353,000	4,349,000	4,195,000	
University of Rhode Island	1,383,000	1,519,000	1,516,000	1,408,000	
Clemson University	3,834,000	4,218,000	4,211,000	3,894,000	
South Dakota State University	2,811,000	3,111,000	3,106,000	2,861,000	
University of Tennessee	5,413,000	5,965,000	5,956,000	5,495,000	
Texas A&M University	7,560,000	8,483,000	8,468,000	7,688,000	
Utah State University	2,070,000	2,279,000	2,280,000	2,114,000	
University of Vermont	1,652,000	1,826,000	1,822,000	1,679,000	
University of the Virgin Islands	952,000	1,049,000	1,048,000	965,000	
Virginia Polytechnic Institute	4,683,000	5,158,000	5,151,000	4,755,000	

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014 a/
Washington State					
University	3,872,000	4,258,000	4,251,000	3,948,000	
West Virginia					
University	2,960,000	3,238,000	3,233,000	3,003,000	
University of					
Wisconsin	5,790,000	6,394,000	6,384,000	5,878,000	
University of					
Wyoming	1,761,000	1,951,000	1,947,000	1,797,000	
Subtotal	202,110,000	222,855,000	222,570,000	205,664,000	\$229,173,000
Biotechnology Risk					
Assessment	1,133,000	873,000	943,000	861,000	827,000
Multistate Research					
Award Funds	15,000	15,000	0	0	0
Current Research					
Information System	323,000	0	0	0	0
Federal Admin.	6,214,000	6,854,000	6,854,000	6,322,000	7,075,000
Small Business					
Innovation					
Research	5,220,000	5,737,000	5,966,000	5,731,000	6,626,000
TOTAL	215,000,000	236,334,000	236,334,000	218,577,000	243,701,000

a/ Award decisions have not been finalized for FY 2014.

Summary of Personnel Supported with Hatch Act Funds in Fiscal Year 2012						
University/Recipient	Station	Scientist Support	Professional Support	Technical Support	Clerical Support	Total Support
AUBURN UNIVERSITY	ALA	123.9	51.9	45.2	12.2	233.2
UNIVERSITY OF ALASKA	ALK	7.8	1.3	6.1	2.6	17.8
UNIVERSITY OF ARKANSAS	ARK	95.5	253.3	38.6	46.6	434.0
UNIVERSITY OF ARIZONA	ARZT	123.2	205.4	81.5	43.5	453.6
UNIV OF CALIFORNIA	CALB	111.4	173.5	23.9	28.3	337.1
UNIV OF CALIFORNIA (VET-MED)	CALB	1.3	0.0	1.3	0.0	2.6
UNIVERSITY OF CALIFORNIA	CALB	249.5	996.5	136.4	287.4	1,669.8
COLORADO STATE UNIVERSITY	COL	51.3	168.9	44.5	40.3	305.0
CONNECTICUT AGRICULTURAL EXPER. STATION	CONH	29.4	0.0	16.6	0.0	46.0
UNIV OF CONNECTICUT	CONS	7.4	11.3	0.2	6.5	25.4
UNIV OF THE DISTRICT OF COLUMBIA	DC	1.6	0.4	1.6	0.0	3.6
UNIVERSITY OF DELAWARE	DEL	6.2	40.0	55.5	0.0	101.7
UNIVERSITY OF FLORIDA	FLA	140.3	144.7	164.4	135.8	585.2
UNIVERSITY OF GEORGIA	GEO	110.7	109.4	103.4	76.5	400.0
UNIVERSITY OF GUAM UOG STATION	GUA	8.7	2.1	10.8	4.0	25.6
UNIV OF HAWAII	HAW	44.9	19.7	6.1	55.5	126.2
UNIV OF IDAHO	IDA	49.9	34.1	19.6	41.9	145.5
UNIVERSITY OF ILLINOIS	ILLU	89.5	254.6	23.7	38.4	406.2
PURDUE UNIVERSITY	IND	196.3	541.8	76.7	158.5	973.3
IOWA STATE UNIVERSITY	IOW	117.8	190.3	7.3	209.8	525.2
KANSAS STATE UNIV	KAN	142.0	252.2	68.2	33.9	496.3
UNIVERSITY OF KENTUCKY	KY	76.6	99.4	132.0	67.1	375.1
LOUISIANA STATE UNIVERSITY	LAB	84.7	75.4	12.1	54.3	226.5
UNIV OF MASSACHUSETTS	MAS	13.8	0.8	2.5	6.5	23.6
UNIV OF MARYLAND	MD	21.7	19.8	12.6	12.2	66.3
UNIVERSITY OF MAINE	ME	31.1	28.4	15.2	17.7	92.4
MICHIGAN STATE UNIV	MICL	137.0	336.2	189.2	96.9	759.3
UNIV OF MINNESOTA	MIN	90.2	187.5	34.9	109.4	422.0
COLLEGE OF MICRONESIA	MIR	5.2	5.3	4.4	3.2	18.1
MISSISSIPPI STATE UNIV	MIS	60.8	147.9	34.8	167.9	411.4
UNIVERSITY OF MISSOURI	MO	56.0	85.7	10.9	25.3	177.9
MONTANA STATE UNIVERSITY	MONB	57.6	84.3	59.3	10.4	211.6
NORTH CAROLINA STATE UNIV	NC	147.8	240.5	230.8	35.8	654.9
NORTH DAKOTA STATE UNIV	ND	82.9	180.0	25.3	16.5	304.7
UNIVERSITY OF NEBRASKA	NEB	135.5	298.0	144.9	191.0	769.4
UNIVERSITY OF NEVADA	NEV	8.6	7.5	0.3	3.4	19.8
UNIVERSITY OF NEW HAMPSHIRE	NH	11.8	16.8	0.0	0.0	28.6
RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY	NJ	55.6	69.0	41.3	6.2	172.1
NEW MEXICO STATE UNIVERSITY	NM	22.4	10.6	5.0	3.9	41.9
NORTH HERN MARIANAS COLLEGE	NMA	1.1	0.0	0.5	0.9	2.5
CORNELL UNIVERSITY	NY.C	28.9	49.1	19.9	100.7	198.6
N Y AGRICULTURAL EXPT STATION	NY.G	0.4	5.4	8.9	39.5	54.2
OHIO STATE UNIVERSITY	OHO	105.8	194.8	81.3	75.8	457.7
OKLAHOMA STATE UNIVERSITY	OKL	74.1	174.8	6.6	2.0	257.5
OREGON STATE UNIVERSITY	ORE	90.2	270.0	45.3	98.6	504.1
PENNSYLVANIA STATE UNIVERSITY	PEN	219.5	252.3	40.1	108.3	620.2
UNIVERSITY OF PUERTO RICO AT MAYAGUEZ	PR	19.5	2.5	14.2	78.8	115.0
UNIVERSITY OF RHODE ISLAND	RI	7.9	1.1	0.0	0.0	9.0
AMERICAN SAMOA COMM COLLEGE	SAM	0.0	0.0	0.0	0.0	0.0
CLEMSON UNIVERSITY	SC	31.2	0.0	59.3	13.2	103.7
SOUTH DAKOTA STATE UNIVERSITY	SD	72.5	117.4	26.3	58.3	274.5
UNIVERSITY OF TENNESSEE	TEN	85.5	181.2	87.9	25.9	380.5
TEXAS A&M UNIVERSITY	TEX	271.2	968.7	101.0	143.8	1,484.7
UTAH STATE UNIVERSITY	UTA	14.9	7.0	1.5	0.0	23.4
VIRGINIA POLYTECHNIC INSTITUTE	VA	99.8	300.3	156.6	38.9	595.6
UNIV OF THE VIRGIN ISLANDS	VI	3.0	9.5	13.0	2.0	27.5
UNIVERSITY OF VERMONT	VT	12.1	24.9	3.1	3.2	43.3
UNIV OF WISCONSIN	WIS	14.5	56.7	1.6	13.2	86.0
WASHINGTON STATE UNIVERSITY	WN.P	89.6	265.6	35.3	24.1	414.6
WEST VIRGINIA UNIVERSITY	WVA	27.6	40.9	0.0	20.4	88.9
UNIVERSITY OF WYOMING	WYO	7.2	5.2	3.0	1.5	16.9
TOTAL		4,084.4	8,271.9	2,592.5	2,898.5	17,847.3

SMITH-LEVER FUNDING

Mr. Aderholt: Please update the chart provided in the fiscal year 2014 hearing record showing the allocation of Smith-Lever funding per university for fiscal years 2010 through 2014 (estimate). Include the number of personnel supported by the funding for the most recent year the information is available.

Response: Recipients of Smith-Lever funds have the flexibility to distribute funds among research projects, infrastructure, and personnel as they wish to meet the needs of their university. The distribution of these dollars varies from state to state. The latest data on personnel supported with Smith-Lever funds as reported into the Current Research Information System (CRIS) by recipient institutions is for fiscal year 2012. The recipient institutions do not assemble the data until the close of the fiscal year and then the reporting process requires approximately six months. Fiscal year 2013 data is being collected now, but not all institutions have made their reports available yet. Therefore, we do not have complete data for fiscal year 2013 at this time.

[The information follows:]

Smith-Lever 3B&C					
University/Recipient	FISCAL YEAR 2010	FISCAL YEAR 2011	FISCAL YEAR 2012	FISCAL YEAR 2013	FISCAL YEAR 2014
TUSKEGEE UNIVERSITY	\$17,477	\$17,377	\$11,691	-	-
AUBURN UNIVERSITY ALABAMA	7,289,187	7,240,411	7,248,218	\$6,664,854	-
AMERICAN SAMOA COMMUNITY	928,148	922,092	929,445	853,258	-
UNIVERSITY OF ALASKA	1,184,579	1,161,046	1,171,027	1,101,222	-
UNIVERSITY OF ARKANSAS	6,109,705	6,086,710	6,052,806	5,995,314	-
UNIVERSITY OF ARIZONA	2,160,365	2,134,242	2,148,487	1,959,920	-
UNIVERSITY OF CALIFORNIA	7,671,905	7,618,497	7,679,293	7,049,778	-
COLORADO STATE UNIVERSITY	3,286,400	3,255,690	3,253,133	2,943,159	-
UNIVERSITY OF THE DISTRICT OF COLUMBIA	1,164,277	1,157,560	1,165,360	1,173,160	-
UNIVERSITY OF CONNECTICUT	2,142,874	2,131,815	2,145,240	2,006,134	-
UNIVERSITY OF DELAWARE	1,309,216	1,295,154	1,305,086	1,198,653	-
UNIVERSITY OF FLORIDA	4,895,110	4,765,113	4,771,051	4,303,794	-
UNIVERSITY OF GEORGIA	8,140,304	7,931,125	7,937,929	7,356,101	-
UNIVERSITY OF GUAM	992,314	985,529	993,766	908,419	-
UNIVERSITY OF HAWAII	1,350,934	1,342,841	1,337,693	1,233,322	-
UNIVERSITY OF IDAHO	2,917,548	2,855,276	2,829,245	2,610,046	-
UNIVERSITY OF ILLINOIS	9,894,305	9,762,419	9,608,622	9,024,252	-
PURDUE UNIVERSITY	9,011,459	8,941,163	8,947,625	8,260,039	-
IOWA STATE UNIVERSITY	9,821,212	9,600,599	9,539,111	8,890,583	-
KANSAS STATE UNIVERSITY	5,866,435	5,787,464	5,776,078	5,320,123	-
KENTUCKY STATE UNIVERSITY	20,946	17,798	70,446	180,476	-
UNIVERSITY OF KENTUCKY	9,717,448	9,598,393	9,642,512	8,792,341	-
LOUISIANA STATE UNIVERSITY	5,687,551	5,440,237	5,442,740	5,015,309	-
UNIVERSITY OF MASSACHUSETTS	2,649,727	2,636,897	2,652,472	2,491,085	-
UNIVERSITY OF MARYLAND	3,427,074	3,379,053	3,387,056	3,118,626	-
UNIVERSITY OF MAINE	2,375,640	2,321,736	2,323,233	2,108,644	-
COLLEGE OF MICRONESIA	1,038,571	1,031,117	1,040,166	946,398	-
MICHIGAN STATE UNIVERSITY	9,187,338	9,100,333	9,107,734	8,378,854	-
UNIVERSITY OF MINNESOTA	9,469,318	9,353,770	9,025,087	8,508,051	-
MISSISSIPPI STATE UNIVERSITY	7,056,358	6,969,275	7,288,639	6,515,440	-
UNIVERSITY OF MISSOURI	8,981,084	8,977,575	8,978,554	8,284,896	-
MONTANA STATE UNIVERSITY	2,767,280	2,692,272	2,734,023	2,467,515	-
NORTH CAROLINA STATE UNIVERSITY	12,176,590	11,917,461	12,019,689	11,103,001	-
NORTH DAKOTA STATE UNIVERSITY	3,607,027	3,579,130	3,567,978	3,313,075	-
UNIVERSITY OF NEBRASKA	5,263,431	5,207,132	5,219,404	4,789,012	-
UNIVERSITY OF NEVADA	1,284,029	1,273,812	1,265,522	1,157,254	-
UNIVERSITY OF NEW HAMPSHIRE	1,765,576	1,758,430	1,748,424	1,573,439	-
RUTGERS UNIVERSITY	2,779,063	2,767,003	2,771,930	2,585,280	-
NEW MEXICO STATE UNIVERSITY	2,269,043	2,209,792	2,177,524	2,015,024	-
NORTHERN MARIANAS COLLEGE	911,968	905,770	913,295	835,319	-
CORNELL UNIVERSITY (ITHACA, NY)	8,697,134	8,458,978	8,330,763	7,610,172	-
OHIO STATE UNIVERSITY	10,799,385	10,795,757	10,861,701	10,039,979	-
OKLAHOMA STATE UNIVERSITY	5,809,900	5,653,495	5,636,391	5,160,452	-
OREGON STATE UNIVERSITY	3,976,905	3,935,054	3,888,942	3,568,628	-
PENNSYLVANIA STATE UNIVERSITY	10,291,681	10,202,134	10,256,552	9,568,936	-
UNIVERSITY OF PUERTO RICO	6,457,245	6,316,580	6,427,403	6,181,976	-
UNIVERSITY OF RHODE ISLAND	1,097,680	1,091,087	1,099,420	1,011,048	-
CLEMSON UNIVERSITY (SOUTH CAROLINA)	5,793,909	5,730,954	5,742,339	5,350,713	-
SOUTH DAKOTA STATE UNIVERSITY	3,704,144	3,603,374	3,606,102	3,369,232	-
UNIVERSITY OF TENNESSEE	9,452,449	9,159,051	9,121,047	8,390,612	-
TEXAS A&M UNIVERSITY	13,291,939	13,161,907	13,137,015	11,946,986	-
UTAH STATE UNIVERSITY	1,917,142	1,826,884	1,836,350	1,687,060	-
VIRGINIA POLYTECHNIC INSTITUTE	7,393,807	7,266,277	7,236,861	6,718,143	-
UNIVERSITY OF THE VIRGIN ISLANDS	959,371	952,994	960,736	880,519	-
UNIVERSITY OF VERMONT	1,878,512	1,862,503	1,858,516	1,689,236	-
UNIVERSITY OF WISCONSIN	8,972,834	8,887,557	8,909,619	8,209,297	-
WASHINGTON STATE UNIVERSITY	4,399,342	4,343,440	4,315,700	3,949,278	-
WEST VIRGINIA UNIVERSITY	4,213,649	4,191,229	4,196,278	3,904,435	-
UNIVERSITY OF WYOMING	1,646,656	1,633,627	1,636,607	1,491,364	-
SUB-TOTAL	289,342,500	285,201,991	285,365,676	263,359,236	\$291,741,375
Additional Civil Service Retirement Workers	0	695,069	616,824	800,808	0
Compensation Program claims reduction	0	0	0	0	0
Special Needs Projects	0	0	0	0	0
TOTAL	\$289,342,500	\$285,897,060	\$285,982,500	\$264,160,044	\$291,741,375
Federal Administration	8,157,500	8,013,940	8,017,500	7,109,403	8,258,625
TOTAL APPROPRIATION	\$297,500,000	\$293,911,000	\$294,000,000	\$271,269,447	\$300,000,000

Smith Lever 3b6c: FTEs Reported in FY 2012 by State and Annual Report

Institution/Planned Program/Knowledge Area	Full Time Equivalent
Alabama A&M University and Auburn University	329.2
American Samoa Community College	19.1
Clemson University and South Carolina State University	166.0
College of Micronesia	40.5
Colorado State University	195.4
Delaware State University and University of Delaware	44.8
Fort Valley State University and University of Georgia	44.5
Iowa State University	88.2
Kansas State University	422.0
Kentucky State University and University of Kentucky	577.0
Louisiana State University	290.2
Michigan State University	178.8
Mississippi State University	256.3
Montana State University	33.8
New Mexico State University	18.3
North Carolina A&T State University and North Carolina State University	542.0
North Dakota State University	52.8
Northern Marianas College	13.6
NY State Agricultural Experiment Station Research and Cornell University	1,398.4
Ohio State University	179.4
Oklahoma State University	254.0
Oregon State University	85.0
Pennsylvania State University	420.4
Purdue University	73.9
Rutgers	159.8
South Dakota State University	69.9
Texas A&M University	467.7
University of Alaska	23.9
University of Arizona	33.0
University of Arkansas	341.1
University of California	252.5
University of Connecticut - Storrs	20.8
University of Florida	418.3
University of Guam	14.4
University of Hawaii	47.5
University of Idaho	100.9
University of Illinois	.2
University of Maine	119.7
University of Maryland and University of Maryland - Eastern Shore	76.0
University of Massachusetts	111.9
University of Minnesota	304.9
University of Missouri	247.0
University of Nebraska	220.0
University of Nevada	37.4
University of New Hampshire	70.3
University of Puerto Rico	166.2
University of Rhode Island	24.2
University of Tennessee	450.0
University of the District of Columbia	48.0
University of the Virgin Islands	31.0
University of Vermont	55.5
University of Wisconsin	111.3
University of Wyoming	100.0
Utah State University	101.6
Virginia Polytechnic Inst. & State University and Virginia State University	305.9
Washington State University	507.7
West Virginia University	177.0
Totals.....	10,939.2

McIntire-Stennis

Mr. Aderholt: Please update the chart provided in the fiscal year 2014 hearing record showing the allocation of McIntire-Stennis funding per university for fiscal years 2010 through 2014 (estimate). Include the number of personnel supported by the funding for the most recent year the information is available.

Response: Recipients of McIntire-Stennis funds have the flexibility to distribute funds among research projects, infrastructure, and personnel as they wish to meet the needs of their university. The distribution of these dollars varies from state to state. Fiscal year 2014 data is being collected now. Please see below. The latest data on personnel supported with McIntire-Stennis funds as reported in the Current Research Information System (CRIS) by recipient institutions is for fiscal year 2012. Fiscal year 2012 personnel data as reported by institutions is provided for the record.

[The information follows:]

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014 a/
Alabama, Auburn University ..	\$644,000	\$623,000	\$521,000	\$392,000	
Alabama, A&M University . . .	138,000	208,000	260,000	294,000	
Alabama, Tuskegee University.	138,000	208,000	260,000	294,000	
University of Alaska, Fairbanks	639,000	681,000	642,000	558,000	
American Samoa Community College	59,000	44,000	44,000	43,000	
Arizona, Flagstaff Northern					
Arizona University	232,000	241,000	221,000	187,000	
Arizona, Tucson-University of					
Arizona	232,000	241,000	221,000	187,000	
University of Arkansas,					
Fayetteville	814,000	919,000	921,000	852,000	
University of California,					
California Polytechnic. . .	120,000	129,000	123,000	114,000	
California, Humboldt	120,000	129,000	123,000	114,000	
California, Berkeley	558,000	602,000	575,000	532,000	
Colorado State University					
Fort Collins	393,000	422,000	403,000	374,000	

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014 a/
Connecticut Agricultural Experiment Station	203,000	257,000	272,000	253,000	
University of Connecticut, Storrs	68,000	86,000	91,000	84,000	
Delaware, Newark	101,000	99,000	115,000	114,000	
University of Delaware . . .	11,000	25,000	49,000	76,000	
Florida, Gainesville	686,000	774,000	775,000	694,000	
Florida, Florida A&M	76,000	86,000	86,000	76,000	
Georgia, Athens	876,000	989,000	991,000	916,000	
Georgia, Fort Valley State . .	97,000	110,000	110,000	102,000	
University of Guam	59,000	44,000	44,000	43,000	
University of Hawaii	218,000	263,000	244,000	227,000	
University of Idaho	586,000	661,000	642,000	576,000	
Southern Illinois University University of Illinois	214,000	261,000	261,000	242,000	
Purdue University	214,000	261,000	261,000	242,000	
Iowa State University, Ames . .	481,000	561,000	563,000	539,000	
Kansas State University . . .	376,000	462,000	463,000	429,000	
Kansas State University . . .	288,000	343,000	303,000	300,000	
Kentucky, Lexington	513,000	579,000	580,000	552,000	
Kentucky, Frankfort	91,000	102,000	102,000	97,000	
Louisiana State University Baton Rouge	539,000	587,000	555,000	513,000	
Louisiana Tech University . .	231,000	252,000	238,000	220,000	
Louisiana, Southern Univ. . .	62,000	120,000	168,000	155,000	
University of Maine	744,000	840,000	842,000	778,000	
University of Maryland	323,000	362,000	307,000	274,000	
Maryland Eastern Shore	0	40,000	77,000	118,000	
University of Massachusetts . .	340,000	422,000	443,000	410,000	
Michigan State University . . .	271,000	313,000	314,000	290,000	
Michigan Tech University . . .	271,000	313,000	314,000	290,000	
University of Michigan	271,000	313,000	314,000	290,000	
University of Minnesota	674,000	780,000	762,000	741,000	
University of Minnesota	722,000	815,000	817,000	770,000	
Mississippi State University. Mississippi, Alcorn State . . .	180,000	204,000	204,000	192,000	
University of Missouri	543,000	631,000	632,000	568,000	
Missouri, Lincoln University . .	61,000	70,000	70,000	63,000	
Montana State University . . .	551,000	641,000	662,000	613,000	
University of Nebraska	270,000	303,000	323,000	263,000	
University of Nevada	147,000	164,000	124,000	116,000	
University of New Hampshire . .	428,000	482,000	483,000	447,000	
New Jersey, Rutgers	253,000	323,000	343,000	355,000	
New Mexico State University . .	340,000	343,000	303,000	245,000	

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014 a/
New York, Cornell	195,000	230,000	240,000	227,000	
New York, State University . .	585,000	690,000	721,000	680,000	
North Carolina State Univ.					
Raleigh	937,000	1,059,000	1,081,000	999,000	
North Dakota State University	165,000	183,000	204,000	153,000	
Ohio Agricultural Research and Development Center	498,000	581,000	602,000	558,000	
Oklahoma State University . .	516,000	601,000	583,000	521,000	
Oregon State University . . .	920,000	1,078,000	1,061,000	944,000	
Pennsylvania State University	639,000	720,000	722,000	668,000	
University of Puerto Rico . . .	95,000	104,000	102,000	98,000	
University of Rhode Island . .	112,000	144,000	144,000	135,000	
South Carolina, Clemson					
University	727,000	800,000	822,000	723,000	
South Dakota State University	182,000	203,000	224,000	208,000	
University of Tennessee . . .	591,000	629,000	665,000	646,000	
Tennessee State University . .	66,000	111,000	117,000	114,000	
Texas, Stephen F. Austin State University	407,000	440,000	441,000	417,000	
Texas A&M University	407,000	440,000	441,000	417,000	
Utah State University	288,000	283,000	244,000	190,000	
University of Vermont	393,000	482,000	503,000	466,000	
University of the Virgin Islands	59,000	84,000	44,000	43,000	
Virginia Polytechnic Institute	717,000	810,000	811,000	734,000	
Virginia State University . . .	80,000	90,000	90,000	81,000	
Washington State University . .	398,000	449,000	451,000	416,000	
University of Washington . . .	487,000	549,000	551,000	509,000	
West Virginia University,					
Morgantown	496,000	559,000	560,000	535,000	
West Virginia University . . .	55,000	62,000	62,000	59,000	
University of Wisconsin	674,000	760,000	742,000	686,000	
Wyoming	235,000	243,000	283,000	282,000	
Subtotal	27,390,000	31,110,000	31,078,000	28,713,000	\$31,979,000
Biotechnology Risk Assessment	37,000	37,000	37,000	35,000	40,000
Federal Administration	870,000	988,000	988,000	914,000	1,019,000
Small Business Innovation					
Research	703,000	799,000	831,000	797,000	923,000
TOTAL	29,000,000	32,934,000	32,934,000	30,459,000	33,961,000

a/ Award decisions have not been finalized for FY 2014.

Summary of Personnel Supported with McIntire-Stennis Funds in Fiscal Year 2012

University/Recipient	Station	Scientist Support	Professional Support	Technical Support	Clerical Support	Total Support
TUSKEGEE UNIVERSITY	ALX	4.9	2.5	0.0	0.0	7.4
ALABAMA A&M UNIVERSITY	ALAX	0.7	2.7	0.0	0.0	3.4
AUBURN UNIVERSITY	ALAZ	12.1	15.8	5.4	16.7	50.0
UNIVERSITY OF ALASKA	ALK	3.1	1.6	1.5	1.6	7.8
UNIVERSITY OF ARKANSAS	ARK	5.5	13.4	0.0	1.2	20.1
UNIVERSITY OF ARIZONA	ARZT	5.9	10.9	3.6	1.8	22.2
NORTHERN ARIZONA UNIVERSITY	ARZZ	0.0	4.8	0.0	0.0	4.8
UNIV OF CALIFORNIA	CALB	16.0	26.8	9.0	5.9	57.7
UNIVERSITY OF CALIFORNIA	CALB	0.6	0.4	0.1	0.1	1.2
CAL POLYTECHNIC STATE UNIV	CALY	0.6	0.9	0.0	1.0	2.5
HUMBOLDT STATE UNIV	CALZ	0.5	2.2	0.0	0.2	2.9
COLORADO STATE UNIVERSITY	COL	1.9	6.2	4.3	0.0	12.4
CONNECTICUT AGRICULTURAL EXPR. STATION	CONH	5.9	0.0	4.0	0.0	9.9
UNIV OF CONNECTICUT	CONS	0.4	0.9	0.0	0.0	1.3
UNIVERSITY OF DELAWARE	DEL	1.2	0.2	7.5	0.0	8.9
DELAWARE STATE UNIVERSITY	DELX	0.0	0.0	0.0	0.2	0.2
UNIVERSITY OF FLORIDA	FLA	11.3	8.6	10.8	12.6	43.3
FLORIDA A&M UNIVERSITY	FLAX	0.0	0.0	0.0	2.0	2.0
UNIVERSITY OF GEORGIA	GEOZ	19.4	14.7	12.2	12.2	58.5
UNIVERSITY OF GUAM UOG STATION	GUA	0.0	0.0	0.4	0.0	0.4
UNIV OF HAWAII	HAW	3.8	1.4	0.9	1.8	7.9
UNIV OF IDAHO	IDAZ	5.4	1.6	0.3	0.0	7.3
UNIVERSITY OF ILLINOIS	ILLU	1.9	3.6	0.0	2.1	7.6
SOUTHERN ILLINOIS UNIV	ILLZ	2.6	4.6	0.8	0.6	8.6
PURDUE UNIVERSITY	IND	9.2	31.6	13.7	13.1	67.6
IOWA STATE UNIVERSITY	IOW	5.6	4.9	0.0	2.1	12.6
KANSAS STATE UNIV	KAN	4.3	6.2	2.9	0.9	14.3
UNIVERSITY OF KENTUCKY	KY.	14.6	5.8	6.8	3.6	30.8
KENTUCKY STATE UNIVERSITY	KY.X	0.0	1.6	0.0	0.0	1.6
LOUISIANA STATE UNIVERSITY	LA.B	6.1	0.8	0.0	3.1	10.0
SOUTHERN UNIV	LAX	2.0	0.0	1.0	0.5	3.5
LOUISIANA TECH UNIVERSITY	LA.Z	2.6	0.0	0.0	0.6	3.2
UNIV OF MASSACHUSETTS	MAS	1.5	0.0	0.1	0.9	2.5
UNIV OF MARYLAND	MD.	2.7	2.3	2.4	2.5	9.9
UNIVERSITY OF MAINE	ME.	11.6	10.3	2.1	4.6	28.6
MICHIGAN STATE UNIV	MICL	3.9	10.5	6.0	3.2	23.6
UNIVERSITY OF MICHIGAN	MICY	0.8	2.8	0.7	3.1	7.4
MICHIGAN TECHNOLOGICAL UNIV	MICZ	0.4	1.2	1.0	0.0	2.6
UNIV OF MINNESOTA	MIN	14.5	34.0	1.8	23.0	73.3
ALCORN STATE UNIVERSITY	MISX	2.0	0.0	0.0	0.0	2.0
FOREST AND WILDLIFE RES CENTER	MISZ	15.3	55.3	0.6	39.2	110.4
UNIVERSITY OF MISSOURI	MO.	6.5	6.4	0.0	2.8	15.7
LINCOLN UNIVERSITY	MO.X	0.4	0.0	0.0	0.0	0.4
UNIVERSITY OF MONTANA	MONZ	1.4	3.5	4.4	0.0	9.3
NORTH CAROLINA STATE UNIV	NC.Z	35.9	83.7	3.8	4.9	128.3
NORTH DAKOTA STATE UNIV	ND.	3.2	2.9	0.1	0.2	6.4
UNIVERSITY OF NEBRASKA	NEB	3.6	8.1	3.9	5.2	20.8
UNIVERSITY OF NEVADA	NEV	1.4	0.4	0.0	0.6	2.4
UNIVERSITY OF NEW HAMPSHIRE	NH.	1.6	3.1	0.0	0.0	4.7
RUTGERS, THE STATE UNIVERSITY OF NJ	NJ.	2.9	2.5	0.9	0.1	6.4
NEW MEXICO STATE UNIVERSITY	NM.	1.2	2.0	1.2	0.2	4.6
CORNELL UNIVERSITY	NY.C	0.8	1.1	1.6	4.2	7.7
STATE UNIV OF NEW YORK	NY.Z	0.5	8.8	3.1	0.5	12.9
OHIO STATE UNIVERSITY	OHO	8.3	12.5	4.5	4.9	30.2
OKLAHOMA STATE UNIVERSITY	OKL	5.9	10.2	0.7	0.0	16.8
OREGON STATE UNIVERSITY	OREZ	43.7	90.8	6.6	9.0	150.1
PENNSYLVANIA STATE UNIVERSITY	PEN	11.0	7.4	0.0	9.3	27.7
UNIVERSITY OF PUERTO RICO AT MAYAGUEZ	PR.	1.3	0.4	1.3	0.7	3.7
UNIVERSITY OF RHODE ISLAND	RI.	0.6	0.0	0.0	0.0	0.6
CLEMSON UNIVERSITY	SC.	4.0	0.0	5.5	1.0	10.5
SOUTH DAKOTA STATE UNIVERSITY	SD.	1.3	2.3	0.0	0.8	4.4
UNIVERSITY OF TENNESSEE	TEN	7.0	37.6	14.4	3.2	62.2
TENNESSEE STATE UNIVERSITY	TENX	1.6	1.0	0.0	0.0	2.6
TEXAS A&M UNIVERSITY	TEX	1.1	2.1	0.0	1.4	4.6
STEPHEN F. AUSTIN STATE UNIVERSITY	TEKY	5.4	8.8	0.0	1.3	15.5
UTAH STATE UNIVERSITY	UTA	2.4	0.0	0.0	0.0	2.4
VIRGINIA POLYTECHNIC INSTITUTE	VA.	15.6	32.7	10.7	4.4	63.4
VIRGINIA STATE UNIVERSITY	VAX	0.1	0.0	0.0	0.1	0.2
UNIV OF THE VIRGIN ISLANDS	VI.	0.3	1.0	0.5	0.2	2.0
UNIVERSITY OF VERMONT	VT.Z	1.3	1.4	0.0	1.1	3.8
UNIV OF WISCONSIN	WIS	2.3	9.1	0.1	2.0	13.5
WASHINGTON STATE UNIVERSITY	WN.P	1.3	9.8	4.2	1.1	16.4
UNIVERSITY OF WASHINGTON	WN.Z	1.2	2.1	1.1	1.7	6.1
WEST VIRGINIA UNIVERSITY	WVA	7.8	10.7	0.0	0.0	18.5
WEST VIRGINIA STATE UNIVERSITY	WVAX	0.7	0.0	1.0	0.0	1.7
UNIVERSITY OF WYOMING	WYO	1.5	0.5	0.0	0.2	2.2
TOTAL		385.9	654.0	169.5	221.5	1,430.9

Animal Health and Disease

Mr. Aderholt: Please update the chart provided in fiscal year 2014 hearing record showing the allocation of Animal Health and Disease program funding for fiscal years 2010 through 2014 (estimate). Include the number of personnel supported by the funding for the most recent year the information is available.

Response: Recipients of Animal Health and Disease Research funds have the flexibility to distribute funds among research projects, infrastructure, and personnel as they wish to meet the needs of their university. The distribution of these dollars varies from state to state. Recipient institutions complete assembly of personnel data approximately eight months after the close of the fiscal year. Fiscal year 2014 data is being collected now and is not yet available. Fiscal year 2012 personnel data as reported by the institutions is provided for the record.

[The information follows:]

ANIMAL HEALTH AND DISEASE					
State	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014
AL-Auburn University, Agricultural Experiment Station	\$17,894	\$25,075	\$29,559	\$24,979	-
AL-Auburn University, School of Veterinary Medicine	44,553	31,112	40,279	35,607	-
AL-Tuskegee University, School of Veterinary Medicine	391	503	4,548	6,689	-
AK-University of Alaska, Agricultural Experiment Station	-	-	-	-	-
AZ-University of Arizona, Agricultural Experiment Station	30,848	31,330	39,353	38,725	-
AR-University of Arkansas, Agricultural Experiment Station	55,735	57,571	77,375	72,395	-
CA-University of California-Oakland, Agricultural Experiment Station	43,573	54,488	72,572	72,730	-
CA-University of California-Davis, School of Veterinary Medicine	202,351	156,599	166,171	90,911	-
CA-Western Univ. of Health Sciences, College of Veterinary Medicine	-	-	-	18,182	-
CO-Colorado State University, Agric. Exper. Sta. & Col. of Vet. Medicine	170,596	195,261	300,875	285,768	-
CT-University of Connecticut-Storrs, Agricultural Experiment Station	18,512	18,215	24,999	18,613	-
DE-University of Delaware, Agricultural Experiment Station	9,930	10,485	15,477	16,052	-
FL-University of Florida, Agricultural Experiment Station	44,225	46,443	57,135	42,827	-
FL-University of Florida, College of Veterinary Medicine	1,171	592	370	-	-
GA-University of Georgia, Agricultural Experiment Station	10,232	12,937	13,890	13,603	-
GA-University of Georgia, College of Veterinary Medicine	69,291	72,513	104,868	92,499	-
HI-University of Hawaii, Agricultural Experiment Station	1,733	1,064	1,492	1,358	-
ID-University of Idaho, Agricultural Experiment Station	40,715	42,306	49,312	46,097	-
IL-Univ. of Illinois, Agric. Exp. Station & College of Vet. Medicine	60,892	54,026	54,753	41,120	-
IN-Purdue University, Agric. Exp. Station & College of Vet. Medicine	43,195	46,614	61,011	65,319	-
IA-Iowa State University, Agricultural & Home Economics Experiment	42,736	53,812	67,096	55,724	-
IA-Iowa State University, College of Veterinary Medicine	53,948	47,375	74,018	63,478	-
KS-Kansas State University, Agric. Exp. Sta. & College of Vet. Medicine	86,782	87,447	105,083	126,241	-
KY-University of Kentucky, Agricultural Experiment Station	45,308	48,863	64,409	56,303	-
LA-Louisiana State University, Agricultural Experiment Station	13,727	13,815	18,648	16,914	-
LA-Louisiana State University, College of Veterinary Medicine	15,680	17,973	25,606	25,844	-
ME-University of Maine, Agricultural Experiment Station	5,362	5,853	8,372	8,574	-
MD-University of Maryland, Agricultural Experiment Station	20,015	22,274	25,123	19,265	-
MA-University of Massachusetts, Agricultural Experiment Station	3,152	5,287	9,005	9,472	-
MA-Tufts University, School of Veterinary Medicine	35,735	41,042	60,968	57,809	-
MI-Michigan State Univ., Agric. Exper. Sta. & College of Vet. Medicine	62,260	66,851	91,998	101,184	-
MN-University of Minnesota, Agricultural Experiment Station	32,757	34,989	49,763	57,874	-
MN-University of Minnesota, College of Veterinary Medicine	141,837	110,133	115,694	50,474	-
MS-Mississippi State Univ., Ag. & Forestry Exp. Sta. & Col. of Vet. Med.	50,061	52,249	71,251	63,961	-
MO-University of Missouri, Agricultural Experiment Station	7,812	6,121	8,464	4,386	-
MO-University of Missouri, College of Veterinary Medicine	82,332	92,282	130,161	131,525	-
MT-Montana State University, Agricultural Experiment Station	32,823	33,272	45,533	49,174	-
NE-University of Nebraska, Agricultural Experiment Station	93,449	98,676	121,650	114,020	-
NV-University of Nevada, Agricultural Experiment Station	4,468	4,790	6,132	5,661	-
NH-University of New Hampshire, Agricultural Experiment Station	2,927	2,366	3,060	3,383	-
NH-Rutgers University, Agricultural Experiment Station	8,131	8,581	13,346	12,609	-
NM-New Mexico State University, Agricultural Experiment Station	22,112	22,438	26,818	26,096	-

ANIMAL HEALTH AND DISEASE					
State	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014
NY-Cornell University, Agricultural Experiment Station	16,378	13,833	14,184	10,614	-
NY-Cornell University, College of Veterinary Medicine	91,199	97,025	120,897	95,152	-
NC-North Carolina State University, Agricultural Experiment Station	28,348	40,197	69,345	83,247	-
NC-North Carolina State University, College of Veterinary Medicine	60,215	61,841	52,770	16,451	-
ND-North Dakota State University, Agricultural Experiment Station	19,073	18,567	22,480	24,159	-
OH-Ohio State University, Ohio Agric. Research & Development Center	19,230	26,778	40,929	46,773	-
OH-Ohio State University, College of Veterinary Medicine	27,334	24,517	24,312	16,548	-
OK-Oklahoma State Univ., Agric. Exper. Sta. & Col. Of Vet. Medicine	67,354	61,295	68,719	58,810	-
OR-Oregon State University, Agricultural Experiment Station	35,758	42,341	63,491	70,258	-
PA-Pennsylvania State University, Agricultural Experiment Station	54,538	63,979	78,806	75,095	-
PA-University of Pennsylvania, College of Veterinary Medicine	58,803	40,882	43,637	41,919	-
PR-University of Puerto Rico, Agricultural Experiment Station	7,144	7,116	7,996	7,047	-
RI-University of Rhode Island, Agricultural Experiment Station	1,688	1,689	4,575	4,835	-
SC-Clemson University, Agricultural Experiment Station	15,065	16,266	23,458	21,321	-
SD-South Dakota State University, Agricultural Experiment Station	34,325	37,153	47,548	49,503	-
TN-University of Tennessee, Agricultural Experiment Station	16,845	17,579	31,326	29,759	-
TN-University of Tennessee, College of Veterinary Medicine	15,899	13,686	26,349	29,661	-
TX-Texas Agrilife Research, Agric. Exper. Sta. & College of Med.	193,590	182,373	218,949	220,895	-
UT-Utah State University, Agricultural Experiment Station	17,995	19,216	20,637	16,440	-
VT-University of Vermont, Agricultural Experiment Station	6,201	6,291	9,531	8,653	-
VA-VA Polytech. Inst., Agric. Exp. Station & College of Vet. Medicine	36,050	38,797	52,069	53,058	-
WA-Washington State University, Agricultural Experiment Station	3,672	3,480	5,290	10,230	-
WA-Washington State University, College of Veterinary Medicine	75,305	78,901	106,157	113,287	-
WV-West Virginia Univ., Agricultural & Forestry Exper. Station	5,388	5,249	13,279	12,670	-
WI- Univ. of Wisconsin, Agric. Exper. Sta., & College of Vet. Medicine	61,384	60,176	62,209	58,336	-
WY-University of Wyoming, Agricultural Experiment Station	17,200	18,308	234,000	217,444	-
SUB-TOTAL	\$2,737,250	\$2,733,069	\$3,721,192	\$2,437,623	\$3,713,360
Federal Administration.....	118,000	117,764	160,000	147,978	160,000
Small Business Set-Aside.....	70,800	70,658	99,840	95,990	107,520
Biotech. Risk Assessment.....	25,960	24,620	20,980	19,980	19,120
TOTAL	\$2,952,010	\$2,946,111	\$4,002,012	\$3,701,471	\$4,000,000

Summary of Personnel Supported with Animal Health Funds in Fiscal Year 2012							
University/Recipient	Station	Funds	Scientist		Professional		Total
			Support	Support	Support	Clerical Support	
TUSKEGEE UNIVERSITY	AL.V	\$4,548	0.2	0.2	0.0	0.1	0.5
AUBURN UNIVERSITY	ALA	29,559	1.0	0.5	0.0	0.0	1.5
AUBURN UNIVERSITY	ALAV	61,687	1.7	1.0	0.0	0.0	2.7
UNIVERSITY OF ARKANSAS	ASK	77,375	3.3	24.3	15.7	3.1	46.4
UNIVERSITY OF ARIZONA	ARST	22,835	7.7	12.7	0.4	1.9	22.7
UNIV OF CALIFORNIA	CALB	6,197	1.0	0.6	0.0	0.0	1.6
UNIV OF CALIFORNIA (VET-MED)	CALB	34,655	0.2	0.0	0.5	0.0	0.7
UNIVERSITY OF CALIFORNIA	CALB	20,263	2.6	7.6	1.4	1.6	13.2
UNIV OF CALIFORNIA (VET-MED)	CALV	117,887	0.6	0.0	0.3	0.0	0.9
COLORADO STATE UNIVERSITY	COLV	300,875	147.0	148.4	58.5	55.4	409.3
UNIV OF CONNECTICUT	CONS	22,030	0.2	0.7	0.0	0.0	0.9
UNIVERSITY OF DELAWARE	DEL	15,477	0.0	0.0	0.0	0.0	0.0
UNIVERSITY OF FLORIDA	FLA	56,088	2.9	0.0	2.5	0.0	5.4
UNIVERSITY OF GEORGIA	GEO	13,890	0.7	0.7	0.6	0.5	2.5
UNIVERSITY OF GEORGIA	GEOV	29,197	4.1	2.8	1.3	2.0	10.2
UNIV OF HAWAII	HAW	1,492	0.2	0.0	0.0	0.0	0.2
UNIV OF IDAHO	IDA	49,312	0.0	0.0	0.0	0.0	0.0
UNIVERSITY OF ILLINOIS	ILLU	54,753	0.4	1.5	0.5	1.0	3.4
PURDUE UNIVERSITY	IND	61,012	5.4	8.5	0.0	0.0	13.9
IOWA STATE UNIVERSITY	IOW	67,096	0.0	0.2	0.1	1.0	1.3
IOWA STATE UNIVERSITY	IOWV	74,018	0.0	2.0	0.0	0.0	2.0
KANSAS STATE UNIV	KSN	105,083	0.5	1.1	0.0	0.0	1.6
UNIVERSITY OF KENTUCKY	KY.	64,409	3.3	0.9	1.2	2.6	8.0
LOUISIANA STATE UNIVERSITY	LA.B	39,717	1.0	0.5	0.2	0.2	1.9
LOUISIANA STATE UNIVERSITY	LA.V	25,606	0.7	0.6	0.7	0.0	2.0
UNIV OF MASSACHUSETTS	MAS	9,005	0.0	0.0	0.0	0.1	0.1
TUFTS UNIVERSITY	MASV	60,969	0.4	0.0	0.0	0.0	0.4
UNIV OF MARYLAND	MD.	25,123	0.0	0.0	0.0	0.5	0.5
UNIVERSITY OF MAINE	ME.	8,372	0.5	0.6	0.1	0.2	1.4
MICHIGAN STATE UNIV	MICL	91,998	0.6	1.3	0.7	0.4	3.0
UNIV OF MINNESOTA	MIN	49,764	0.8	0.3	0.2	1.7	3.0
UNIV OF MINNESOTA	MINV	115,694	0.3	0.1	0.3	0.2	0.9
MISSISSIPPI STATE UNIV	MISV	64,776	8.1	5.5	6.6	0.0	20.2
UNIVERSITY OF MISSOURI	MO.	6,396	0.0	0.0	0.0	0.0	0.0
UNIVERSITY OF MISSOURI	MO.V	130,161	1.7	0.1	0.0	0.0	1.8
MONTANA STATE UNIVERSITY	MONB	25,973	0.0	0.3	1.4	0.3	2.0
NORTH CAROLINA STATE UNIV	NC.	69,354	2.6	1.1	5.1	0.0	8.8
NORTH CAROLINA STATE UNIV	NC.V	52,770	6.5	0.0	8.0	0.0	14.5
UNIVERSITY OF NEBRASKA	NEB	121,650	3.1	6.9	3.3	4.4	17.7
UNIVERSITY OF NEVADA	NEV	6,132	0.1	0.0	0.0	0.0	0.1
RUTGERS, THE STATE UNIVERSITY OF N.J.	NJ.	13,346	0.3	0.5	0.0	0.0	0.8
NEW MEXICO STATE UNIVERSITY	NM.	26,818	0.2	0.0	0.1	0.3	0.6
CORNELL UNIVERSITY	NY.C	14,184	0.3	0.0	0.0	0.3	0.6
CORNELL UNIVERSITY	NYCV	120,097	0.1	0.4	0.3	1.4	2.2
OHIO STATE UNIVERSITY	OH	41,187	2.0	0.7	0.8	0.0	3.5
OHIO STATE UNIVERSITY	CHOV	24,312	0.4	1.0	0.0	0.0	1.4
OKLAHOMA STATE UNIVERSITY	OKL	68,720	1.9	0.8	0.5	0.0	3.2
OREGON STATE UNIVERSITY	ORE	63,191	0.4	1.4	0.0	0.5	2.3
PENNSYLVANIA STATE UNIVERSITY	PEN	78,806	3.4	1.6	0.0	1.0	6.0
UNIV OF PENNSYLVANIA	PENV	43,608	0.6	0.0	0.4	0.0	1.0
UNIVERSITY OF PUERTO RICO AT MAYAGUEZ	PR.	7,833	0.0	0.0	0.0	0.0	0.0
UNIVERSITY OF RHODE ISLAND	RI.	1,577	0.0	0.0	0.0	0.0	0.0
CLEMSON UNIVERSITY	SC.	23,458	0.1	0.0	0.0	0.0	0.1
SOUTH DAKOTA STATE UNIVERSITY	SD.	47,548	0.6	0.1	0.0	0.2	0.9
UNIVERSITY OF TENNESSEE	TENV	11,318	0.0	0.0	0.0	0.0	0.0
TEXAS A&M UNIVERSITY	TEX	171,101	0.2	1.7	0.0	0.0	1.9
UTAH STATE UNIVERSITY	UTA	20,637	0.0	0.0	0.0	0.0	0.0
VIRGINIA POLYTECHNIC INSTITUTE	VA.	52,069	0.7	1.1	0.8	0.3	2.9
UNIVERSITY OF VERMONT	VT.	9,530	0.0	0.0	0.0	0.0	0.0
UNIV OF WISCONSIN	WIS	62,209	0.3	1.5	0.0	0.3	2.1
WASHINGTON STATE UNIVERSITY	WN.P	5,290	1.9	0.0	0.5	0.0	2.4
WASHINGTON STATE UNIVERSITY	WN.V	106,157	0.2	0.0	0.2	0.0	0.4
WEST VIRGINIA UNIVERSITY	WVA	13,279	0.0	0.1	0.0	0.1	0.2
UNIVERSITY OF WYOMING	WYO	234,000	0.7	0.0	0.9	0.1	1.7
TOTAL		\$3,454,632	223.7	241.9	114.1	81.7	661.4

*Personnel table only shows obligations for salaries. Table does not include obligations for overhead, i.e. supplies and equipment.

Evans-Allen

Mr. Aderholt: Please update the chart provided in the fiscal year 2014 hearing record showing the allocation of Evans-Allen funding per university for fiscal years 2010 through 2014 (estimate). Include the number of personnel supported by the funding for the most recent year the information is available.

Response: Recipients of Evans-Allen funds have the flexibility to distribute funds among research projects, infrastructure, and personnel as they wish to meet the needs of their university. The distribution of these dollars varies from state to state. Fiscal year 2014 data is being collected now. Please see below. The latest data on personnel supported with Evans-Allen funds as reported into the Current Research Information System (CRIS) by recipient institutions is for fiscal year 2012. Fiscal year 2012 personnel data as reported by the institutions is provided for the record.

[The information follows:]

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014 a/
Alabama A&M University . . .	\$2,502,000	\$2,627,000	\$2,624,000	\$2,424,000	
Tuskegee University. . . .	2,483,000	2,607,000	2,605,000	2,405,000	
University of Arkansas-Pine Bluff.	2,153,000	2,254,000	2,252,000	2,089,000	
Delaware State University. . .	1,193,000	1,226,000	1,225,000	1,171,000	
Florida A&M University . . .	1,976,000	2,081,000	2,079,000	1,911,000	
Fort Valley State University	2,863,000	3,005,000	3,002,000	2,775,000	
Kentucky State University. . .	3,414,000	3,590,000	3,587,000	3,304,000	
Southern University.	1,914,000	1,998,000	1,996,000	1,861,000	
University of Maryland-Eastern Shore	1,442,000	1,507,000	1,506,000	1,401,000	
Alcorn State University. . . .	2,383,000	2,487,000	2,484,000	2,318,000	
Lincoln University	3,360,000	3,542,000	3,539,000	3,246,000	
North Carolina A&T State University	3,951,000	4,131,000	4,128,000	3,838,000	
Langston University.	2,188,000	2,307,000	2,305,000	2,113,000	
South Carolina State Univ. . .	2,137,000	2,237,000	2,235,000	2,074,000	
Tennessee State University . .	3,118,000	3,273,000	3,270,000	3,020,000	
Prairie View A&M University.	4,606,000	4,879,000	4,875,000	4,437,000	
Virginia State University. . .	2,661,000	2,790,000	2,788,000	2,580,000	
West Virginia State Univ. . .	1,407,000	1,478,000	1,476,000	1,363,000	
Subtotal	45,751,000	48,019,000	47,977,000	44,331,000	\$49,394,000
Small Business Innovation Research	1,176,000	1,234,000	1,284,000	1,233,000	1,426,000
Current Research Information System	48,000	0	0	0	0
Biotech Risk Assessment. . .	70,000	118,000	110,000	97,000	91,000
Federal Administration . . .	1,455,000	1,527,000	1,527,000	1,412,000	1,574,000
Total, Evans-Allen Program	48,500,000	50,898,000	50,898,000	47,073,000	52,485,000
a/ Award decisions have not been finalized for FY 2014.					

Summary of Personnel Supported at 1890 Institutions with Evans-Allen Funds in Fiscal Year 2012							
University/Recipient	Station	Funds	Scientist Support	Professional Support	Technical Support	Clerical Support	Total Support
TUSKEGEE UNIVERSITY	ALX	2,307,517	25.1	49.4	1.1	11.0	86.6
ALABAMA A&M UNIVERSITY	ALAX	1,664,236	9.9	43.8	5.7	0.1	59.5
UNIV OF ARKANSAS	ARX	2,031,286	10.7	9.3	4.4	4.4	28.8
DELAWARE STATE UNIVERSITY	DELX	1,217,299	6.5	7.4	0.0	6.7	20.6
FLORIDA A&M UNIVERSITY	FLAX	1,637,578	17.0	0.0	0.0	13.3	30.3
FORT VALLEY STATE UNIVERSITY	GEOX	3,001,892	6.5	2.7	0.2	0.8	10.2
KENTUCKY STATE UNIVERSITY	KYX	2,493,606	14.4	9.5	1.0	0.0	24.9
SOUTHERN UNIV	LAX	1,996,178	9.4	10.0	11.5	9.4	40.3
UNIV OF MARYLAND EASTERN SHORE	MDX	1,057,229	2.6	3.3	4.8	1.5	12.2
ALCORN STATE UNIVERSITY	MISX	2,609,665	15.0	10.0	1.0	19.0	45.0
LINCOLN UNIVERSITY	MOX	3,822,473	15.0	6.9	35.6	2.6	60.1
NORTH CAROLINA A&T STATE UNIV	NCX	4,563,734	16.4	34.4	17.4	28.0	96.2
LANGSTON UNIVERSITY	OKLX	1,345,379	16.6	4.2	0.0	4.1	24.9
SOUTH CAROLINA STATE UNIVERSITY	SCX	1,408,513	4.8	24.0	14.6	0.0	43.4
TENNESSEE STATE UNIVERSITY	TENX	1,391,383	12.5	29.5	0.0	0.0	42.0
VIRGINIA STATE UNIVERSITY	VAX	2,938,650	10.2	4.6	7.2	4.9	26.9
WEST VIRGINIA STATE UNIVERSITY	WVAX	1,371,289	3.3	1.0	4.0	15.0	23.3
TOTAL		36,857,907	195.9	250.0	108.5	120.8	675.2

*Personnel table only shows obligations for salaries. Table does not include obligations for overhead, i.e. supplies and equipment.

1890 Institutions

Mr. Aderholt: Please update the chart provided in the fiscal year 2014 hearing record showing funding provided to 1890 institutions for fiscal years 2010 through 2014 (estimate). Include the number of personnel supported by the funding for the most recent year the information is available.

Response: Recipients of 1890 Institutions funds have the flexibility to distribute funds among research projects, infrastructure, and personnel as they wish to meet the needs of their university. The distribution of these dollars varies from state to state. Fiscal Year 2014 data is being collected now. Data on personnel are not reported by the institutions.

[The information follows:]

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014 a/
Alabama A&M University . . .	\$2,116,000	\$2,111,000	\$2,111,000	\$1,938,000	
Tuskegee University. . . .	2,116,000	2,111,000	2,111,000	1,937,000	
University of Arkansas-Pine Bluff	1,854,000	1,851,000	1,851,000	1,709,000	
Delaware State University. . .	1,163,000	1,162,000	1,162,000	1,115,000	
Florida A&M University . . .	1,814,000	1,811,000	1,811,000	1,665,000	
Fort Valley State University	2,529,000	2,523,000	2,523,000	2,326,000	
Kentucky State University. . .	3,162,000	3,156,000	3,156,000	2,911,000	
Southern University.	1,659,000	1,656,000	1,656,000	1,540,000	
University of Maryland-Eastern Shore	1,316,000	1,314,000	1,314,000	1,223,000	
Alcorn State University. . . .	1,980,000	1,976,000	1,976,000	1,832,000	
Lincoln University	3,191,000	3,184,000	3,184,000	2,930,000	
North Carolina A&T State University	3,583,000	3,577,000	3,577,000	3,326,000	
Langston University.	1,955,000	1,951,000	1,951,000	1,784,000	
South Carolina State Univ. . .	1,819,000	1,815,000	1,815,000	1,676,000	
Tennessee State University . .	2,807,000	2,802,000	2,802,000	2,585,000	
Prairie View A&M University.	4,194,000	4,184,000	4,184,000	3,804,000	
Virginia State University. . .	2,369,000	2,364,000	2,364,000	2,184,000	
West Virginia State Univ. . .	1,343,000	1,341,000	1,341,000	1,242,000	
Subtotal	40,970,000	40,888,000	40,888,000	37,727,000	\$42,163,000
Federal Administration	1,707,000	1,704,000	1,704,000	1,572,000	1,757,000
Total	42,677,000	42,592,000	42,592,000	39,299,000	43,920,000

a/ Award decisions for FY 2014 have not been finalized.

1994 Institutions

Mr. Aderholt: Please update the chart provided in the fiscal year 2014 hearing record showing the funding provided to 1994 institutions for fiscal years 2010 through 2014 (estimate). Include the number of personnel supported by the funding for the most recent year the information is available.

Response: This information is provided for the record. No personnel were supported in the most recent reporting year available.

[The information follows:]

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014 a/
Dine` College, Arizona	\$85,000	\$85,000	\$85,000	\$78,000	
Tohono O'odam Community College Arizona	85,000	90,000	90,000	78,500	
Haskell Indian Nations University, Kansas	85,000	80,000	80,000	73,500	
Bay Mills Community College, Michigan	184,467	95,000	95,000	87,500	
Saginaw Chippewa Tribal College, Michigan	100,000	100,000	100,000	92,000	
Leech Lake Tribal College, Minnesota	85,000	90,000	90,000	84,000	
White Earth Tribal and Community College, Minnesota	85,000	100,000	100,000	92,000	
Fond du Lac Tribal College, Minnesota	100,000	175,000	175,000	162,000	
Blackfeet Community College, Montana	196,543	90,000	90,000	84,000	
Chief Full Knife College, Montana	85,000	100,000	100,000	92,000	
Aaniih Nakoda College, Montana	85,000	100,000	100,000	92,000	
Fort Peck Community College, Montana	267,260	100,000	100,000	92,000	
Little Big Horn College, Montana	85,000	85,000	99,000	92,000	
Salish Kootenai College, Montana	100,000	185,000	185,000	170,000	

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014 a/
Stone Child College, Montana	299,709	175,000	175,000	161,000	
Little Priest Tribal College, Nebraska	100,000	100,000	100,000	92,000	
Nebraska Indian Community College, Nebraska	100,000	90,000	90,000	84,000	
Institute of American Indian Arts, New Mexico	85,000	100,000	100,000	92,000	
Navajo Technical College, New Mexico	100,000	185,000	185,000	170,000	
Southwestern Indian Polytechnic Institute, New Mexico	185,000	180,000	180,000	168,000	
Cankdeska Cikana Community College, North Dakota	85,000	181,000	181,000	168,000	
Fort Berthold Community College, North Dakota	85,000	185,000	185,000	168,000	
Sitting Bull College, North Dakota	85,000	185,000	185,000	169,000	
Little Mountain Community College, North Dakota	200,000	100,000	100,000	92,000	
United Tribes Technical College, North Dakota	100,000	185,000	185,000	170,000	
Ilisagvik College	0	0	85,000	78,000	
Oglala Lakota College, South Dakota	200,000	100,000	100,000	92,000	
Sinte Gleska University, South Dakota	100,000	100,000	100,000	92,000	
Sisseton Wahpeton College, South Dakota	85,000	85,000	85,000	78,500	
Northwest Indian College, Washington	300,000	340,000	340,000	321,000	
College of Menominee Nation, Wisconsin	185,000	90,000	90,000	84,000	
Lac Courte, Oreilles Ojibwa Community College, Wisconsin	200,000	85,000	85,000	170,000	
Subtotal	4,122,979	4,126,000	4,140,000	3,819,000	\$4,268,000
Federal Administration	173,000	172,000	172,000	159,000	178,000
Peer Panel Costs	25,021	14,000	0	0	0
Total	4,321,000	4,312,000	4,312,000	3,978,000	4,446,000

a/ Award decisions have not been finalized.

Native American Institutions Endowment Fund

Mr. Aderholt: Please update the Committee on the status of the Native American Institutions Endowment Fund for fiscal years 2009 through 2014 (estimate). Please provide a chart that includes the total amount in the endowment, its earned interest and the allocation to universities.

Response: The history of total funding in the Endowment is shown below. The interest earned during each fiscal year was distributed through grants during the following fiscal year. For example, FY 2010 interest earned was distributed during FY 2011; interest earned during FY 2011 was distributed during 2012; and so on. The estimated interest-earned in 2013 that will be available in FY 2014 is \$5,085,461. Information on allocation for FYs 2009 through 2013 is provided for the record.

[The information follows:]

National Institute of Food and Agriculture
ENDOWMENT HISTORICAL DATA

Below is historical information for the fund showing total appropriations to date and total interest earned. Dollar and percentage increases are included.

Fiscal Year	Appropriation	Interest Income	Change from Prior Year	% Change
1996	\$4,600,000	\$115,747	N/A	N/A
1997	4,600,000	451,397	\$335,651	290 %
1998	4,600,000	673,678	222,281	49 %
1999	4,600,000	980,913	307,235	46 %
2000	4,600,000	1,192,019	211,106	22 %
2001	7,100,000	1,486,927	294,908	25 %
2002	7,100,000	1,771,586	284,659	19 %
2003	7,053,850	1,929,849	158,262	9 %
2004	8,946,900	2,180,705	250,856	13 %
2005	11,904,000	2,577,358	396,653	18 %
2006	12,000,000	3,249,613	672,255	26 %
2007	12,000,000	3,209,004	-40,609	-1%
2008	11,710,000	3,822,753	613,749	19 %
2009	11,880,000	4,266,794	444,041	12%
2010	11,880,000	4,307,355	40,561	1%
2011	11,880,000	4,742,733	435,378	10%
2012	11,880,000	5,206,053	463,320	10%
2013	11,880,000	5,085,461	-120,592	-2%
TOTAL	160,214,750	47,229,945		

National Institute of Food and Agriculture
Native American Institutions Endowment Fund Interest
Funding History

Institutions	Fiscal Year 2009 Actual	Fiscal Year 2010 Actual	Fiscal Year 2011 Actual	Fiscal Year 2012 Actual	Fiscal Year 2013 (Est.)a/
Aaniiih Nakoda College	0	0	0	\$101,197	\$99,042
Bay Mills Community College	\$88,748	\$100,276	\$97,494	116,937	128,423
Blackfeet Community College	133,266	145,560	151,175	155,854	159,554
Candeska Cikana Community College	79,713	89,090	87,419	100,678	102,350
Chief Dull Knife College	78,727	88,188	88,993	92,894	108,382
College of Menominee Nation	99,754	139,967	123,154	138,212	144,183
Crownpoint Institute of Technology	126,202	145,019	0	0	0
Dine' College	299,509	307,397	302,144	395,241	371,639
D-Q University	0	0	0	0	0
Fond du Lac Tribal and Community College	90,555	88,729	81,437	106,905	115,775
Fort Belknap College	78,235	86,384	82,382	0	0
Fort Berthold Community College	84,313	98,291	94,031	94,278	96,318
Fort Peck Community College	104,190	127,338	116,227	130,082	135,816
Haskell Indian Nations University	210,967	231,079	229,572	245,970	238,551
Ilisagvik College, AK	60,165	86,384	71,362	78,712	79,974
Institute of American Indian Arts	84,970	96,126	90,410	97,045	119,667

Institutions	Fiscal Year 2009 Actual	Fiscal Year 2010 Actual	Fiscal Year 2011 Actual	Fiscal Year 2012 Actual	Fiscal Year 2013 Actual a/
Lac Courte Oreilles Ojibwa Community College	107,639	115,431	108,514	107,769	107,798
Leech Lake Tribal College	83,327	89,090	87,262	87,359	96,513
Little Big Horn College	102,383	118,318	122,997	137,001	137,762
Little Priest Tribal College	61,150	71,589	69,945	75,253	83,476
Navajo Technical College	0	0	181,558	236,111	223,764
Nebraska Indian Community College	61,315	69,244	71,677	75,597	80,752
Northwest Indian College	152,979	159,994	213,043	173,324	191,464
Oglala Lakota College	220,987	259,585	269,871	301,838	336,422
Saginaw Bay Chippewa Tribal College	57,866	66,898	65,537	70,927	72,385
Salish Kootenai College	157,085	184,531	238,860	209,474	219,094
Si Tanka University	0	0	0	0	0
Sinte Gleska University	161,028	181,103	168,492	167,097	178,623
Sisseton Whapeton Community College	75,442	85,121	81,280	89,608	93,205
Sitting Bull College	96,469	111,101	104,421	116,245	129,395
Southwest Indian Polytechnic Institute	166,120	176,051	164,084	193,907	195,940
Stone Child College	95,319	110,380	104,736	115,726	129,785
Tohono O'Odham Community College	66,571	73,213	72,779	80,614	90,870
Turtle Mountain Community College	162,835	176,592	162,195	199,961	198,858
United Tribes Technical College	161,849	154,041	165,658	190,275	210,144
White Earth Tribal and Community College	60,165	64,012	66,010	71,274	71,996
Subtotal, Interest Payments to Colleges	3,669,843	4,096,122	4,134,719	4,553,365	4,747,920
Federal Administration	152,910	170,672	172,280	168,319	197,830
Total Endowment Interest	3,822,753	4,266,794	4,306,999	4,721,684	4,945,750

a/ \$260,303 is not available due to sequestration.

Formula Funds and Competitive Funds

Mr. Aderholt: Please provide a comparison of total formula funds and competitive funds per year for fiscal years 2009 through 2013.

Response: The information is submitted for the record.

[The information follows:]

NIFA Appropriations*
(Millions)

	2009	2010	2011	2012	2013
Competitive	\$483	\$550	\$530	\$522	\$390
Capacity/Formula	682	708	732	732	676
Other Capacity and Infrastructure	218	239	90	92	90
Endowment Funds**	(12)	(12)	(12)	(12)	(12)
Total***	1,383	1,497	1,352	1,346	1,156

*Includes mandatory and discretionary funds.

**Endowment Funds - these appropriated funds are invested.

***Includes estimated interest on Tribal College Endowment Funds.

Competitive Awards to 1890 Institutions

Mr. Aderholt: Please provide for the record a list of all competitive research, education and integrated grants received by 1890 institutions for fiscal years 2008 through 2013. Include the award amount and purpose of the grant.

Response: The information is submitted for the record.

[The information follows:]

Purpose	Recipient	Amount
FY 2008		
Cumulative Effects of Drought and Urbanization on the Flint River Watershed Ecosystem: Integrated Research, Education, and Extension	Alabama A & M University	\$521,222
Community Outreach for Small and Limited Resource Farmers and Ranchers	Alabama A & M University	300,000
On-line Dual Credit Partnerships and Recruiting for 21st Century Professionals in Food and Agricultural Science	Alabama A & M University	199,592
Advancing Food Science in Pre- and Post Secondary Education	Alabama A & M University	199,628
Strengthening the Preparation of Underrepresented Minorities for Entrance into Family and Consumer Sciences Professions	Alabama A & M University	195,340
Enhancement of Student Participation and Career Development in Nanobiotechnology	Alabama A & M University	197,906
Small Farm Outreach Training and Technical Assistance Project	Alcorn State University	299,331
Development of Virus Resistant Sweet Potato Varieties through Biotechnology Approach	Alcorn State University	292,076

Purpose	Recipient	Amount
NET: Dev., Implementation and Evaluation of Educational Program for Promoting Healthy Eating Choices and Preventing Weight Gain in Adolescents	Delaware State University	50,000
Persistence of Enteric Viruses in Oysters (<i>Crassostrea virginica</i>)	Delaware State University	100,000
Efficient Production of Ethanol from Transgenic Self-Processing Cassava (<i>Manihot esculenta</i> Crantz) Plants	Delaware State University	99,992
From the Farm to the Runway	Delaware State University	299,512
Curriculum and Outreach Materials Development for Plant Science	Delaware State University	184,386
Use of Legume Comparative Genomics for Understanding Common Bean Rust Resistance	Delaware State University	299,901
Providing Socially Disadvantaged Minority Farmers with Technical Training to Produce, Value-Added and Market Alternative/Specialty Crops	Florida A & M University	299,835
Characterization of Organic Matter in Forest Fire for Emission Factors Assessment and Source Tracing	Florida A & M University	251,960
A Collaborative Effort To Increase Minorities In Graduate Environmental Sciences Education	Florida A & M University	198,749
Development of a Regulatory Plant Science Curriculum at Florida A&M University	Florida A & M University	199,754
The Development of A Raspberry Genetic Improvement Program	Florida A & M University	299,782
Developing a Prototype Digital Commodity-Based Identification Resource for Pests: A Model Using Cultivated Palms	Florida A & M University	299,996
Scutellaria as a medicinal crop: Cryopreservation, hairy root culture, organic farming and anticancer activity	Fort Valley State University	434,258
Integrated Approaches to Improving Ethanol Production from Pearl Millet a Crop for Marginal Lands	Fort Valley State University	499,966
Mentoring for Academic Success: An Approach for Recruiting and Retaining Minority Family and Consumer Sciences Majors at KSU	Kentucky State University	200,000
Creation of Summer Educational Opportunities in Biotechnology to Recruit Students and Enhance STEM Areas at Kentucky State University	Kentucky State University	199,293
Development of a Master's in Environmental Studies Degree Program & Graduate Student Recruitment & Retention at Kentucky State University	Kentucky State University	200,000
Establishing a Pilot Tannery and Capability for Goat Leather Research at Langston University	Langston University	300,000
Boer Goat Selection for Residual Feed Intake	Langston University	300,000
Using Experiential Learning in Natural Resources to Mentor Students' Professional Development	Lincoln University	199,433

Purpose	Recipient	Amount
Nano-Biotechnology	Lincoln University	193,728
Reducing Arsenic Uptake by Domestic Rice Plants	Lincoln University	467,435
Recruitment and Retention Strategies for Educating Students for Successful Careers in Agribusiness	North Carolina A & T State University	255,746
Interdisciplinary Project-based Course Modules Development and Incorporation to Improve the Earth Science Program and Student Recruitment	North Carolina A & T State University	199,322
An Integrated Process for Production of Ethanol and Bio-based Products from Lignocellulosic Biomass	North Carolina A & T State University	499,272
Upgrading and Equipping Animal Science Instructional Laboratory	Prairie View A & M University	199,996
Project "PAW PALS": A Campus Wellness Program Recruitment and Training of Under-represented Minorities into Agribusiness Careers	Prairie View A & M University	157,698
Enhancing the Teaching Capacity of Urban Forestry Program at Southern University and A&M College	South Carolina State University	199,653
Salvaging Craw-Crab Offal in Organic Production Systems (SCOOPS)	Southern University	199,650
Adaptability, Flavonoid Properties and Value Addition of Hibiscus sabdariffa	Southern University	269,685
Application of Nanotechnology in Forest Health Management	Southern University	450,000
Training in the Areas of Conservation and Environmental Stewardship, Farm Safety, Bio-security Issues, and Financial and Risk Management	Southern University	448,877
Training in Information Technologies to Enhance Agricultural Instruction, Research and Outreach	Tennessee State University	300,000
A Genomic and Proteomic Search for Segregating Adipose Genes in Broilers	Tennessee State University	200,000
Developing Pigeonpea as a Viable Cash Crop on Small Farms	Tennessee State University	291,990
Small Farm Training and Technical Assistance Project	Tennessee State University	500,000
Tuskegee University Undergraduate Program in Public Health Nutrition (UPPHN)	Tuskegee University	300,000
Interdisciplinary Experiential Natural Resource Learning Opportunities	Tuskegee University	200,000
Biosensor for Rapid, Sensitive and Specific Detection of Avian Influenza Virus H5N1	University of Arkansas	200,000
Training and Technical Assistance for Socially Disadvantaged Farmers in Central and Southwest Arkansas	University of Arkansas at Pine Bluff	375,000
Development of Drought Tolerant Sweet Potato for Hot-Humid Southeast Arkansas and North Mississippi and Transfer of Technology to Farmers	University of Arkansas at Pine Bluff	300,000
Identification, Assessment, and Delivery of Food Safety Education and Training for Food	University of Arkansas at Pine	100,000
		100,000

Purpose	Recipient	Amount
Service Institutions in the Mississippi Delta	Bluff	
Establishment of a Modern Educational Laboratories in Integrative Physiology Fishes	University of Arkansas at Pine Bluff	48,720
Enhancing Ichthyology Training, Teaching, and Museum Collections	University of Arkansas at Pine Bluff	199,041
Increasing the Number of Minority Food Inspectors through Mentoring and Career-Oriented Experiential Learning at the University of Arkansas	University of Arkansas at Pine Bluff	194,181
Enhancing New Fashion Merchandising Faculty Expertise for Quality Curriculum Development	University of Maryland Eastern Shore	50,000
Strengthening the International Capacity of University of Maryland Eastern Shore Students and Faculty: A Belize Field Experience	University of Maryland Eastern Shore	199,926
Identification and Characterization of Biological Control Agents for Lepidopterous Pest in Delmarva Ecosystem	University of Maryland Eastern Shore	92,933
Effect of management practices on alpaca fiber production	Virginia State University	498,886
FY 2009		
Enhancing and Sustaining Profitability of Minority and Underserved Farmers and Ranchers in Alabama	Alabama A & M University	\$300,000
Strengthening Soil Science Research and Training at 1890 Land-Grant Universities	Alabama A & M University	10,000
Technical Assistance and Outreach for Socially Disadvantaged Farmers in Delaware	Delaware State University	299,908
Evaluate the health benefit of Njansa Oil Seed through its effect on Expression genes involve Lipid Biosynthesis in Hen.	Delaware State University	99,993
New and Beginning Farmer Training Program	Florida A & M University	225,079
Landowner Initiative for Forestry Education (LIFE)	Fort Valley State University	300,000
Assisting Soc. Disadv. Farmers Who Grow Vegetables to Improve their Prod., business and Marketing Practices to Insure a Safer Food Supply	Kentucky State University	300,000
Mobilizing Against Threats to Small Producers (MATS)	Langston University	300,000
Financial Management Assistance to Small Producers (FiMASP)	Langston University	300,000
Viability of Beginning Farmers and Ranchers Project (ViBEF)	Langston University	525,000
Empowering Socially Disadvantaged Farmers and Ranchers in Missouri with Sustainable Agriculture Techniques and Appropriate USDA Outreach Pro	Lincoln University	300,000
Responding to the Needs of Socially Disadvantaged Livestock Producers	North Carolina A & T State University	300,000

Purpose	Recipient	Amount
Enhancing the Income of Small and Medium Sized Farms by Strategic Year-Round Production.	North Carolina A & T State University	100,000
Expansion of Ethanol Production: Evaluation of Costs and Benefits to Rural Communities in the Upper Mississippi River Basin	North Carolina A & T State University	608,240
Farm Outreach Program	Prairie View A & M University	299,972
Partnership for Building Capacity of Socially Disadvantaged Farmers and Ranchers in South Carolina	South Carolina State University	300,000
Promoting Diversity in the Agribusiness Profession: Multicultural Scholars Program at SC State University	South Carolina State University	120,000
Small Farmer Agricultural Leadership Institute - Class III	Southern University	300,000
An Innovative Approach for Integrating Health Care Providers into Food Borne Illness Prevention for Older Adults	Tennessee State University	599,868
Introducing Commercial Meat Goat Production to Minority Farmers in Tennessee and Alabama	Tennessee State University	300,000
Small Farm Outreach, Training and Technical Assistance Project	Tuskegee University	300,000
Sustainable Development for Alabama's Black Belt: Linking Socio-economic, Institutional, and Environmental Factors	Tuskegee University	100,000
Using USDA Programs & Extension Practices to Help Socially Disadvantaged Producers Maintain their Farms	University of Arkansas at Pine Bluff	300,000
Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers	University of Maryland Eastern Shore	300,000
Small Farm Outreach and Technical Assistance for Socially Disadvantaged Farmers in Virginia	Virginia State University	299,880
Virginia State University Multicultural Scholars Program (VSU-MSP)	Virginia State University	72,000
FY 2010		
Academic Enhancement Program for Preparing Human Capital for 21st Century Careers	Alabama A & M University	\$149,977
Enhancement of Minority Participation in Functional Food Product Development in Food Science Programs	Alabama A & M University	140,851
Community Planning Approaches for Strengthening Global and Local Food Systems Security	Alabama A & M University	140,841
Enhancement of Minority Student Participation in Food Safety	Alabama A & M University	140,848
Entrepreneurship and Local Economic Development: An Education Program for Disadvantaged Communities	Alabama A & M University	598,515
Interactive 3-D Game-Based Mobile Water Conservation Learning Lab	Alabama A & M University	299,995
Enhancing Experiential Education across the Animal Science Curriculum at Alcorn State University	Alcorn State University	149,450

Purpose	Recipient	Amount
Establishing an Advanced Plant Pathology course to strengthen agriculture related education at Alcorn State University	Alcorn State University	146,125
Enhancing Global Perspectives Using Videoconferencing and Experiential Learning	Alcorn State University	149,997
Population monitoring and alternate control methods of vegetable insects	Alcorn State University	185,475
Developing an Agronomic Practice to Increase the Net Return from Sweet Potato	Alcorn State University	298,854
Experiential Learning in Agriculture and Natural Resources at Delaware State University	Delaware State University	146,700
Enhancing Geographic Information System Education and Delivery through Collaboration: Curricula Design, Faculty, Staff, and Student Training	Delaware State University	299,996
A geospatial teaching laboratory for student education	Delaware State University	140,978
Enhancing and Enriching the DSU Didactic Program in Dietetics	Delaware State University	149,253
Outreach-incorporated studies of reforestation and soil conservation on Delaware marginal land	Delaware State University	299,997
Genetics to Control Parasites in Goats and Establishment of a Small Ruminant Parasitology Resource in Delaware	Delaware State University	199,628
Addressing The Needs Of High-Risk Small Flock & Niche Market Poultry Flocks By Establishing The Center For Small Flock Res. & Innovation	Delaware State University	199,886
Directing the Metabolic Flux Towards Overexpression of Flavonoid Nutraceuticals in Muscadinia Grape	Florida A & M University	125,000
Computing Solutions for Enhanced Teaching and Learning in the Biological and Agricultural Systems Engineering Mobile Classroom Environment	Florida A & M University	149,965
Empowering the Students to Decisiveness - FAMU Summer Biotech Academy	Florida A & M University	149,719
Establishment of Veterinary Technology Track: Cultivating Pre-vet./Veterinary Tech. Professionals to Satisfy the Need of the 21st century	Florida A & M University	463,576
Study Abroad: Achieving an International Perspective on Agriculture and Natural Resources in South Africa	Florida A & M University	300,000
Surveying Human Subjects: A Teaching Application Using Environmental and Natural Resource Economics	Florida A & M University	149,227
Genetical Enhancement Of American Native Grapes For Overexpression Of Flavonoid Nutraceuticals	Florida A & M University	299,945
Building Capacity of the Soil and Water Analysis Laboratory at Florida A&M University	Florida A & M University	290,460
Strengthening Developmental Biology Research at FAMU to Enhance Muscadine Grape Berry Quality and Value-Added Characteristics	Florida A & M University	299,999
Biological Assessment of Headwater Streams in	Florida A & M	298,748

Purpose	Recipient	Amount
Ravine Ecosystems of Northwest Florida	University	
Towards Understanding Mechanisms of Host Resistance to Downy Mildew Disease of Grapevine (Vitis L.)	Florida A & M University	299,765
CESTA Summer Youth Development Institute: (In Search of the Next George Washington Carver)	Florida A & M University	199,425
FAMU Rural Youth Entrepreneurial Project	Florida A & M University	200,000
Strengthening Food Technology Program at Fort Valley State University	Fort Valley State University	140,639
Enhancing Recruitment, Retention and Graduation of Underrepresented Minorities for Successful Professional Careers in Agricultural Economics	Fort Valley State University	149,842
Evaluation of In-Field Production of Ethanol from Sweet Sorghum	Fort Valley State University	299,286
Integrated Sustainable Aquaculture Research and Teaching for Rural Communities and their Economies	Kentucky State University	498,324
Kentucky State University Center For Family Nutrition and Wellness Education	Kentucky State University	200,000
Management Education for Goat and Sheep Producers in a Bearish Economy	Kentucky State University	187,914
A Mobile Kitchen for Fruit and Vegetable Processing Training and Extension Initiatives for Pawpaw and Sorghum Syrup	Kentucky State University	300,000
Undergraduate Research Experience in Agbiotechnology at Langston University	Langston University	149,996
Establishing A Langston University Testing Center For Electric Fence Modifications Of Cattle Barb Wire Fence For Goat Containment	Langston University	300,000
Effects of Selected Nutritional Components on Immunity to Haemonchus in Goats	Langston University	299,950
Training Farmer Educators on Goat Mortality and Butcher Waste Composting, A Regional Approach	Langston University	279,614
Enhancing Production Capabilities of Socially Disadvantaged and Underserved Farmers via Low-Literacy Meat Goat Production Training Materials	Langston University	282,000
Urban AG Connections: An Integrated Model for Implementing School-Based Urban Agriculture, Nutrition Education and Farm-to-School Programs	Langston University	600,000
Attracting Minority Students to Environmental Science	Lincoln University	140,617
Tracking Dissolved Organic Nitrogen in Terrestrial Aquatic Systems Using Fluorescence EEM Spectroscopy	Lincoln University	499,369
Microalgae-Based Biofuels and Bioproducts	Lincoln University	499,984
Gardening as a Therapy to Improve Physical and Mental Health	Lincoln University	562,943
Enhancing Communication, Design, and Critical Thinking Skills of Students through Problem Solving and GIS Applications in Natural Resources	North Carolina A & T State University	149,977
Development of integrated food protection and	North Carolina A	138,755

Purpose	Recipient	Amount
defense education and extension program for students and professionals in 1890 universities	& T State University	
Developing a Global Campus for School of Agriculture and Environmental Sciences	North Carolina A & T State University	140,188
Preparing Undergraduate and SET 4-H Students for the Global Workplace Through Enhanced Technology	North Carolina A & T State University	300,000
Promoting Healthy Lifestyles through Smart Kitchen-Laboratory Design	North Carolina A & T State University	149,997
Permaculture Laboratory for Teaching and Recruiting Agriculture Majors	North Carolina A & T State University	149,999
Food and agricultural byproduct-based biochars for enhanced soil fertility and long term carbon sequestration	North Carolina A & T State University	299,986
A Reactive Distillation Process for Upgrading Bio-oil to Transportation Fuels and Bioplastics	North Carolina A & T State University	388,844
Integrated Research and Outreach Intervention to Prepare Small Scale Produce Farmers in NC for Upcoming Traceability Requirements	North Carolina A & T State University	292,319
Interdisciplinary Ph.D. Program in Food and Bioprocess Technologies for Training of Future Minority Faculty	North Carolina A & T State University	150,000
Engaging Limited Resource Small Farmers and Woodland Owners to Promote Best Agroforestry Technologies in North Carolina	North Carolina A & T State University	193,307
Developing Sustainable Pasture Based Livestock Extension Educational Tools for Integrated Use	North Carolina A & T State University	282,000
Developing Globally Agricultural Ready Scholars for the 21st Century	North Carolina A & T State University	150,000
Agricultural Systems Engineering - Fellowship Program	North Carolina A & T State University	118,000
Acquiring Laboratory Instrumentation for Food Education (A LIFE)	Prairie View A & M University	140,632
Establishment of an Agricultural Robotics Lab at Prairie View A&M University	Prairie View A & M University	276,299
Project Jumpstart	Prairie View A & M University	141,000
Artificial Cellulose Type Catalysts for Cellulosic-Ethanol Process	Prairie View A & M University	300,000
Reduction of Escherichia coli O157:H7 in Small-Scale Cow/Calf Operations using Best Management Practices	Southern University	1,077,639
Utilizing E-Learning to Enhance Preparation of Food and Nutrition Graduates	Southern University	150,000
Global Food and Agricultural Challenges: Strategies for Recruiting and Training Students in the Food and Agricultural Sciences	Southern University	150,000
Building Capacity and Enhancing Economic	Southern	140,890

Purpose	Recipient	Amount
Development Through Experiential Learning in AMTX	University	
Strengthening Teaching and Learning in Urban Forestry through Climate Change Education	Southern University	299,836
Graduate Education and Training in Global Food Security and Agricultural Bio-Security	Southern University	293,600
Integrating Bio-energy Science and Technology into Agricultural Education at Southern University and A&M	Southern University	298,794
Quantifying the Responses of Urban Tree Species to Elevated CO2 and Flooding	Southern University	299,947
Ultraviolet-B Radiation Protection Strategies in Selected Southern Trees	Southern University	299,510
Southern University Childhood Obesity Prevention Study	Southern University	299,503
Preparing Families for Future Health and Wealth Challenges	Southern University	264,733
Academy for the Academic Enhancement of High School Students in the Food and Agricultural Sciences	Southern University	199,684
Strategies to Improve Farm and Business Efficiency Through Integrated Communications	Southern University	185,323
Characterization of Root Proteomes for Drought and Salt Tolerance in Wild Tomato Species	Tennessee State University	124,552
Bringing Sustainable Environmental Consumer Practices to the Community and the Classroom through Development and Implementation of Learning	Tennessee State University	149,774
Building Capacity in Graduate Agricultural and Extension Education: Curriculum and Instructional Delivery through Integration of Technology	Tennessee State University	149,301
Building Capacity of Youth - Active and Media Savvy	Tennessee State University	599,992
Proteomic Analysis of Campylobacter Surface Antigens for Developing an Innovative Fingerprinting Scheme	Tennessee State University	299,998
Development of Biological based IPM for Powdery Mildew in Flowering Dogwood	Tennessee State University	299,981
A Molecular Model for Tolerance to Toxic Metal Ions in Plants	Tennessee State University	299,992
Characterization of Novel Hydrolytic Enzymes for Improving Conversion Efficiency of Lignocellulosic Biomass into Ethanol	Tennessee State University	299,999
Developing And Evaluating Sustainable Production of Eastern Gamagrass as Complementary Bioenergy Feedstock to Switchgrass	Tennessee State University	423,287
Water Smart: Watershed Academy for County Agents in Tennessee	Tennessee State University	188,000
Alternatives to Conventional Pesticide in Disease and Pest Management in Nursery Production System	Tennessee State University	199,997
Nashville Children Eating Well for Health	Tennessee State University	860,000

Purpose	Recipient	Amount
Enhancing the Viability and Sustainability of Beginning Farmers and Ranchers through Collaboration, Mentoring and Whole Farm Planning	Tuskegee University	675,750
Strengthening Faculty and Students' Global Competence and Experiential Learning in Agriculture, Natural Resource Management and Conservation	Tuskegee University	300,000
Portable Distance Learning Utility and International Veterinary Outreach	Tuskegee University	137,573
Establishing an Integrated Program in Aquatic Animal Health at Tuskegee University	Tuskegee University	557,353
Nucleotide Binding Site (NBS) Profiling of Resistance Gene Analogs in the Sweet Potato Transcriptome	Tuskegee University	499,564
Evaluation of Tillage Practices on Soil Quality and Carbon Seq. Using Selected Soil Enzyme Activities and Measure of Soil Microbial Diversity	Tuskegee University	282,000
Development of Silvopasture Systems Involving Meat Goats Under Pine Plantation	Tuskegee University	476,577
Enhancing Capacity of Tuskegee University to Conduct Water Quality Extension Educational Programs	Tuskegee University	300,000
Building the Capacity of Program Delivery By Volunteer Youth Extension Paraprofessionals for Childhood Obesity Prevention Programs	Tuskegee University	300,000
Career Awareness, Planning, and Leadership Development to Enhance Recruitment and Retention of Minority Students	University of Arkansas at Pine Bluff	149,682
Career Awareness and Opportunities in the Agriculture, Environment and Life Sciences	University of Arkansas at Pine Bluff	299,871
Biochemical and Genetic Techniques to Advance Research in Lipid Metabolism and Nutrition of Channel Catfish and Largemouth Bass	University of Arkansas at Pine Bluff	281,630
Terminator-less Transgene Constructs for Efficient Gene Silencing in Crop Plants	University of Arkansas at Pine Bluff	500,000
Collection and Evaluation of Ornamental, Flowering and Nursery plants for adaptation in the lower Mississippi Delta Region	University of Arkansas at Pine Bluff	173,568
Building Curriculum and Experiential Learning in Sustainable Agriculture to Enhance Students' Communication and Problem-Solving Skills	University of Maryland Eastern Shore	149,997
Bio-Fuels, Sustainability, and Geospatial Information Technologies to Enhance Experiential Learning Paradigm for Precision Agriculture Project	University of Maryland Eastern Shore	150,000
Enhancing Undergraduate Research & Experiential Learning in Human Sciences, Family & Consumer Sciences, & Human Ecology	University of Maryland Eastern Shore	148,892
Increasing Capacity to Attract, Retain & Graduate Underrepresented Minorities in Low Enrollment Programs in Human Ecology	University of Maryland Eastern Shore	149,897

Purpose	Recipient	Amount
Evaluation Of Practical Post-Harvest Mitigation Strategies To Reduce The Abundance Of Vibrio Bacteria In Molluscan Shellfish	University of Maryland Eastern Shore	499,895
Watershed Level Examination of Urea Use as Fertilizer and the Production of the Biotoxin Domoic Acid	University of Maryland Eastern Shore	499,938
Food Safety Risks For Leafy Greens And Tomatoes	University of Maryland Eastern Shore	499,999
Enhancing Cowpea Production in the Delmarva Region to Increase Bio-Diversity and Food Security	University of Maryland Eastern Shore	299,999
Characterizing Certain Grass Plants and Forage Soybean Genotypes as Sources of Biofuel and their Potential for Phosphorus Hyperaccumulation.	University of Maryland Eastern Shore	300,000
Development of a Dry Poultry Litter Incorporation Technology to Protect Air and Water Quality	University of Maryland Eastern Shore	599,980
Head Start: Jump Start on Healthy Lifestyle Program in Somerset County, Maryland	University of Maryland Eastern Shore	200,000
Anti-diabetic Properties of Grape Pomace	Virginia State University	287,415
Evaluation of Stinging Nettle (<i>Urtica dioica</i> L.) Nutrient Recovery from Manure Impacted Soils	Virginia State University	299,115
Establishing 1890s Land Grant Universities Water Center	Virginia State University	564,000
High Tunnel Raspberry Production - An Alternative Enterprise for Small Growers in Virginia	Virginia State University	179,167
Implementing Metagenomic-Enabled Systems Analysis to Engineer Energy Thresholds and Resilience in Microbial Bioenergy Communities.	West Virginia State University	564,000
FY 2011		
Trends and Emerging Issues in Soil Microbial Ecology: Challenges and Opportunities	Alabama A & M University	\$10,000
Enhancing Agribusiness Curriculum and Increasing Student Experiential Learning Through Global Internships	Alabama A & M University	150,000
Enhancing Recruitment and Retention in Animal Science to Build Capacity in Pre-Veterinary Medicine at AAMU	Alabama A & M University	149,916
Building Abilities of Students, Faculty and Alabama A&M University through Workshops in Food & Animal Science	Alabama A & M University	148,231
Urbanization and Loss of Prime Agricultural Land in North Alabama region: A Remote Sensing and Geographic Information System-Based Study	Alabama A & M University	500,000
Strengthening the Small Ruminant Extension Program at Alabama A&M University	Alabama A & M University	223,068
Comprehensive Entrepreneurship Extension Team Project	Alabama A & M University	348,106
Strategies to Expand Canola Acreage in the	Alabama A & M	140,081

Purpose	Recipient	Amount
Southern United States	University	
An In-Depth IPM and Environmental Education for Limited-Resource Farmers in Rural Mississippi	Alcorn State University	249,860
Real-time PCR Viability Assay for <i>Vibrio</i> and Total Bacteria in Seafood and Water	Delaware State University	299,998
Developing Novel Bioenergy Crops By Simultaneous Expression Of Hyperthermophilic Starch-Hydrolyzing Enzymes In Transgenic Cassava Tubers	Delaware State University	279,974
Establishment of a Mobile Meat Processing Lab (MMPL) at Delaware State University	Delaware State University	247,884
Enhancing Graduate Student Recruitment and Retention in Soil and Water Science at Florida A&M University	Florida A & M University	149,673
Developing a Decision Support Interface System for Selection and Implementation of Agricultural Best Management Practices in Florida	Florida A & M University	599,795
Biological Control of Honey Bee Pests in Florida: Enhancement of Market Competitiveness	Florida A & M University	298,133
Cost-Effective Pathogen Reduction Strategies and Food Safety Training for Small and Very Small Meat Processors in Georgia	Fort Valley State University	100,000
Carbon Sequestration and Nitrogen Cycling for Green House Gas Mitigation by Southeastern US Annual and Perennial Energy Crops	Fort Valley State University	170,968
Strengthening Animal Science Undergraduate and Graduate Instruction by Upgrading the Laboratories to Teach Animal Biotechnology	Fort Valley State University	149,891
Germplasm Conservation, Anti-adipocytic and Anticancer Activity, and Metabolic Engineering in the Genus <i>Scutellaria</i>	Fort Valley State University	455,589
Development of a Baccalaureate Degree Program in Agriculture, Food, and Environment and Supporting Research Opportunities at Kentucky State	Kentucky State University	598,360
Health Benefits and Chemopreventive Properties of Two Native Teas	Kentucky State University	299,993
Developing A Natural Pesticide Formulation For Organic Growers	Kentucky State University	292,772
4-H Youth Development: An Afterschool Mentoring Program For At-Risk Youth	Kentucky State University	250,000
A Multifaceted University/School/Food Industry Collaborative for Reducing Urban Childhood Obesity	Langston University	600,000
Extension Education Delivery Tools for Dairy Goat Producers: A Web-Based Certification Program and E-book	Langston University	350,000
Lincoln University Natural Resource Program Development, Recruitment, and Retention	Lincoln University	127,832
Silver Nanoparticles as Pesticide for Agricultural Applications	Lincoln University	425,243
Novel <i>Escherichia Coli</i> Genetic Markers for Water Safety	Lincoln University	428,818
Developing a Behaviorally-Based, Sustainable	Lincoln	255,214

Purpose	Recipient	Amount
Integrated Pest Management Push-Pull Strategy for Cucumber Beetles in Missouri	University	
Hydrologic Processes Controlling Stream Water Quality in a Missouri Claypan Watershed	Lincoln University	306,237
Evaluating the Performance and Grazing Behavior of Meat Goats in the Development of a Field Station in Missouri Woodlands	Lincoln University	278,468
Development of Aquaculture Integrated Pest Management Training for Missouri Stakeholders	Lincoln University	14,837
Dietary Flavonoids as Reactive Carbonyl Scavengers to Prevent the Formation of Advanced Glycation End Products	North Carolina A & T State University	143,375
Post-Harvest Processing of Peanut and Wheat Products to Reduce Inherent Allergens	North Carolina A & T State University	499,980
Successful Small-Scale Enterprise Endeavors	North Carolina A & T State University	570,254
Proteomics Instrumentation Meets Education (PrIME) at North Carolina A&T State University	North Carolina A & T State University	149,910
Educating Healthy Children: A Gardening Education and Nutrition Curriculum	North Carolina A & T State University	147,401
Expanding Access to Family and Consumer Sciences Studies: Developing an On-line FCS Master's Program	North Carolina A & T State University	148,428
Carnosic Acid Enriched Rosemary Extract and its Active Components Reduce Weight Gain and Type 2 Diabetes	North Carolina A & T State University	300,000
An Investigation of Grape Pomace as A Potential Functional Food Ingredient For Obesity Prevention and Weight Control	North Carolina A & T State University	291,716
Remediation of Contaminated Soils and Water and Swine Manure Odor Reduction Using Zero Valent Nano Iron Particles	North Carolina A & T State University	299,928
Enhancing Experiential Experiences in Nutrition and Health	Prairie View A & M University	149,999
Enhancing the Education of Marriage and Family Graduates in the Electronic Age	Prairie View A & M University	149,792
Hydrologic Influences on Soil Organic Carbon Loss Monitoring Using Stable Isotopes	Prairie View A & M University	499,999
Integrating Sustainability into Urban Forestry and Agricultural Education at Southern University	Southern University	300,000
Combating Childhood Obesity with Caregivers as Change Agents	Southern University	279,354
Sustainable Forage Management Practices through Intensive Sequential Grazing System for Cattle and Goat production	Southern University	287,005
Developing Biofuels from Sustainable Alternative Non-Food Feedstocks in Louisiana	Southern University	490,128
Building Opportunities through Leadership Development	Southern University	122,292
An Integrated Approach to control Methicillin-	Tennessee State	100,000

Purpose	Recipient	Amount
Resistant Staphylococcus aureus and Clostridium difficile from Limited Resource Poultry	University	
Nashville Children Eating Well for Health	Tennessee State University	927,488
Establishing a Professional Sci Master's Program to Develop Future Biotechnology Workforce with Business Skills for Sustainable Agriculture	Tennessee State University	227,801
Integrated evaluation of genetic variations in broiler chickens	Tennessee State University	227,788
Enhancing the Viability of Undeserved Small Farms and Rural Communities Using Emerging Network Science	Tennessee State University	455,169
Identifying Food Safety Risk Factors and Educational Strategies for Consumers Purchasing Seafood and Meat Products Online	Tennessee State University	455,506
Improving Nitrogen and Water Use Efficiency to Reduce Greenhouse Gases Emission in Corn Croplands	Tennessee State University	299,974
American Ginseng and Childhood Obesity: the Effects and Mechanisms in Mice and Preadipocytes	Tennessee State University	227,754
Foodborne Pathogens Detection and Education to Support Sustainable Agriculture for Small Scale Producers	Tuskegee University	100,000
Organic Farming Planning Proposal for Research and Extension in Alabama	Tuskegee University	49,886
Genetic and Molecular Characterization of Phospholipid Biosynthetic Pathways as Drug Targets in the Livestock Parasite Haemonchus contortus	Tuskegee University	299,999
Increasing Adoption of Organic Farming Practices in Alabama through Teaching and Educational Extension Activities	Tuskegee University	600,000
Increasing Adoption of Organic Farming Practices in Alabama through Teaching and Educational Extension Activities	Tuskegee University	600,000
Graduate Training in Food Safety and Human Nutrition: An Approach that Integrates Diagnostics, Nutrition and Risk Analysis.	Tuskegee University	219,500
Shelf-Life Extension and Quality Enhancement of Chevron Products	University of Arkansas at Pine Bluff	150,000
Food and Agricultural Sciences: Preparing Future Graduate Students	University of Maryland Eastern Shore	300,000
Management of Unwanted Vegetation Using Small Ruminants (Sheep and Goats) in Tree Farms and Recreational Areas on Delmarva.	University of Maryland Eastern Shore	249,869
Family FARMS Extension Capacity Building	University of Maryland Eastern Shore	199,320
Integration of Nanotechnology Education into the Agriculture-STEM (A-STEM) Undergraduate Curriculum	Virginia State University	150,000

Purpose	Recipient	Amount
Climate Change and Adaptation: Curriculum Design, International Experiences for Students and Faculty in Australia, and Precollege Awareness	Virginia State University	300,000
Preparing Underrepresented Minorities For Careers in Agricultural Sciences through Summer Enhancement Programs	Virginia State University	149,345
Breeding Tepary Bean for Drought Tolerance, Yield, and Nutritional Quality	Virginia State University	297,241
S. Pennelliii, a Potential Feedstock for Bio-Gasoline Production	Virginia State University	368,434
Reinforcing Skills and Building Infrastructure for Production, Handling, Processing, and Distribution of Vegetable Soybean (Edamame)	Virginia State University	49,280
Sponsoring the 16th Biennial Research Symposium of the Association of 1890 Research Directors	West Virginia State University	50,000
Assoc. of Gene Expression Profiles of Oxidative Phosphorylation and Nutrient Eff., Growth and Dev. in Different Life Stages of Rainbow Trout	West Virginia State University	295,663
4-H Family Growth	West Virginia State University	246,158
FY 2012		
Silvopasture Systems for Increasing Productivity, Profitability, and Sustainability on Small and Medium-Sized Farms in the Southeast USA	Alabama A & M University	\$498,000
Farm Incubator Educational Training Program and Web-based Resource Center for Beginning Farmers and Ranchers	Alabama A & M University	675,491
Strengthening the Education Pipeline for Minority Wildlife Students using Experiential Learning, Mentoring, and Assessment of Student Learning	Alabama A & M University	299,165
Nanotechnology Application in the Food Engineering Curriculum	Alabama A & M University	297,948
Building Global Engagements to Enhance Faculty & Student's Professional Development & Career Opportunities in Agriculture's Challenge Areas	Alabama A & M University	299,999
Capacity Building for Sustainable Local Food Systems Planning in North Alabama through Science, Technology, Innovation and Synergistic Part	Alabama A & M University	299,680
Successful Aging Initiative: Community Based Education to Promote Health and Asset Management for Alabama's Older Adults	Alabama A & M University	248,430
Addressing Critical and Emerging Safety Issues in Human, Animal and Environmental Health Through Extension Outreach	Alabama A & M University	249,437
Increasing Experiential Learning Opportunities in Rural Development and Food Security Programs and Projects	Alcorn State University	149,965
Development and Evaluation of Purslane as Functional Feed for Production of Omega-3 Healthy Pork	Alcorn State University	491,416

Purpose	Recipient	Amount
Exploring Melon Genetic Diversity to Breed Novel Morphotypes for Dissemination into Small Farms Through a Participatory Selection Approach	Alcorn State University	498,645
Enhancing Sustainable Vegetable Production, Marketing and Management for Small Farm Families	Alcorn State University	245,677
Development of Probiotics and Quantitative Assay for Salmonella and Campylobacter in Poultry	Delaware State University	149,874
Integrating Agricultural and Cultural Experiences in Student Training: A Study Abroad Program to Ghana	Delaware State University	299,975
On-farm Training Program for Students from Non-farm Backgrounds	Delaware State University	149,000
Developing Novel Bioenergy Crops By Simultaneous Expression Of Hyperthermophilic Starch-Hydrolyzing Enzymes In Transgenic Cassava Tubers	Delaware State University	20,000
Increasing Horticulture Based Outreach and Extension Program Activities by Delaware Cooperative Extension.	Delaware State University	247,230
An Integrative Transcriptome, Proteome and Metabolome Approach for Better Understanding Plant - Pathogen Interactions in Grape	Florida A & M University	268,961
Building Capacity for Clean Plant Diagnostic of Grape & Small Fruits at FAMU to Enhance Research & Extension in Florida & Southeastern US	Florida A & M University	299,744
Enhancing the Capacity of Urban Agriculture in North Florida Using Best Management of Farming Practices	Florida A & M University	348,371
Reaching a New Generation of Agro-Entrepreneurs Through Enhanced Program Delivery Strategies	Florida A & M University	250,000
Youth Development Summer Inst. Phase II: Enhancement of Research & Ext. Learning Labs (RELL), In Search of Next George Washington Carver	Florida A & M University	199,991
Carbon Sequestration and Nitrogen Cycling for Green House Gas Mitigation by Southeastern US Annual and Perennial Energy Crops	Fort Valley State University	800,000
Project Georgia Residential Energy Efficiency Network (GREEN)	Fort Valley State University	249,015
Multicultural Scholars in Agricultural Economics: Enhancing Food and Agriculture Diversity	Fort Valley State University	160,000
Farming for Cash: An Apprenticeship Program for Kentucky's Beginning Limited-Resource and Small-Scale Farmers	Kentucky State University	525,646
Development of an Apiculture Course Designed to Broaden the Student Experience	Kentucky State University	149,490
Kentucky State University Nutritional Sciences Option for the Agriculture, Food, and Environment Degree	Kentucky State University	150,000
Integrated Approach for Sustainable Aquaculture	Kentucky State	599,751

Purpose	Recipient	Amount
and Agriculture Production with the Use of Reclaimed Water from Rural Communities	University	
Screening the USDA Capsicum Germplasm Collection for Antioxidants and Heavy Metals Bioaccumulation	Kentucky State University	299,373
A Working Spanish Language Education Program for Cooperative Extension Personnel	Langston University	145,304
Sustainable Small Ruminant Production Through Selection for Resistance to Internal Parasites	Langston University	600,000
Mentoring Students in Natural Resources to Meet the Triple Challenge of Managing Invasive Species and Rare Species in a Changing Climate	Lincoln University	149,072
A Practical Approach To Integrating Nanotechnology Education Into Agriculture And Environmental Science Curriculum	Lincoln University	149,640
Sustainable Market Development and Resource Use for Specialty Crops	Lincoln University	369,415
Families Integrating Nature, Conservation, and Agriculture-The FINCA model	Lincoln University	249,575
Dietary Flavonoids Inhibit the Formation of Advanced Glycation End Products by Trapping Reactive Dicarbonyl Compounds-An in Vivo Study	North Carolina A & T State University	489,884
Metrics of Sustainable Design: Enhancing Faculty Knowledge and Curriculum Delivery in an Accredited Landscape Architecture Program	North Carolina A & T State University	149,978
Transformational Learning:Promoting Students' Success thru the Professional Development Engagement Plan(PDEP) & Active Learning Experiences	North Carolina A & T State University	150,000
Modification of Wheat and Corn Brans by Microfluidization Process	North Carolina A & T State University	299,940
Wheat Bran for Colon Cancer Prevention: A Targeted Metabolomic Approach	North Carolina A & T State University	300,000
Using Technology to Deliver Parent Education and Information	North Carolina A & T State University	250,000
Early Work Readiness Skill Development Program	North Carolina A & T State University	250,000
Enhancing Undergraduate Training of Underrepresented Ethnic Populations in Natural Resources and Environmental Sciences	North Carolina A & T State University	180,000
Establish an Intelligent Equipment Lab for Precision Agriculture at Prairie View A&M University	Prairie View A & M University	299,974
CBG - Bioinformatics Research for Agriculture Innovative Students	Prairie View A & M University	299,786
Integrating Novel Biopolymers into Microbial Enteropathogen-reduction Studies (ChitoBiOMEs)	Prairie View A & M University	496,035
Enhancing the Disaster Resilience for Rural Communities through Better Disaster Preparedness and Improved Emergency Response	South Carolina State University	573,643
JAGS in AG: Recruitment, Exploration, and	Southern	149,838

Purpose	Recipient	Amount
Retention	University	
Alternative Utilization of Roselle Hibiscus as Small Farm and Niche Market Crop	Southern University	500,000
Academy for the Academic Enhancement of High School Students in the Food and Agricultural Sciences	Southern University	243,979
Eradicating Food Deserts in Neighborhoods through the Development of School Gardens	Southern University	250,000
Using Agriculture as a Fast Track Vehicle for Change through Experiential Learning	Southern University	249,886
Development of Learning Modules for Assuring Academic Enrichment Support for Youth in Rural Louisiana	Southern University	247,737
Molecular Characterization of <i>Erwinia tracheiphila</i> Strains for Cucurbit Host Specificity	Tennessee State University	150,000
Development and Evaluation of Science-Based Messages to Improve Consumers' Storage, Handling, and Preparation of Poultry and Poultry Product	Tennessee State University	480,174
Improving and Strengthening Enrollment and Retention of Minority Students In Pre-veterinary Medicine at Tennessee State University	Tennessee State University	149,952
An Economic Analysis of Local Food Environment and Demand for Fruits and Vegetables in a Food Desert Cluster in Tennessee	Tennessee State University	299,196
Identification and Modulation of Functional Protein Association Networks for Drought Tolerance in Switchgrass	Tennessee State University	499,995
Geospatial Information Systems Training/ Outreach for Extension and Research Professionals Working with Small Farmers and Forest Land Owners	Tennessee State University	249,969
Building Extension Capacity Using a Mobile Biodiesel Production Platform	Tennessee State University	249,744
Enhancing Food Safety Knowledge of Small to Medium-sized Produce Growers in Tennessee and Illinois	Tennessee State University	250,000
Nashville Children Eating Well for Health	Tennessee State University	957,363
Effect of <i>Toxoplasma gondii</i> Gral0 Protein on Ovine Immune Response to Infection	Tuskegee University	200,000
Development of PCR-Microplate Array for <i>Salmonella</i> Serovars and Specific Identification of Foodborne Pathogens using Nanoparticles-Based Bio	Tuskegee University	258,895
Linking DNA Markers to Key Bioenergy Traits in <i>Miscanthus</i>	Tuskegee University	299,524
Value-Added Leadership for Strengthening Extension Personnel and Citizens	Tuskegee University	350,000
Building Capacity of Tuskegee University to Provide Science-Based Gardening Education in Alabama Black Belt Counties	Tuskegee University	349,611
Attributable Factors to Rice Straighthead and	University of	499,926

Purpose	Recipient	Amount
Development of Natural Evaluation Site	Arkansas at Pine Bluff	
Enhancing Recruitment and Retention Strategies Building Enrollment Pipelines for Higher Education in the Food and Agricultural Sciences	University of Arkansas at Pine Bluff	149,802
Design-build Extension Delivery: A New, Integrated Model for Rapid, Cost-Effective Technology Transfer	University of Arkansas at Pine Bluff	349,819
From the Mississippi Delta to the Niger Delta: Strengthening Teaching and Extension Capacity at UAPB to Enhance International Programming	University of Arkansas at Pine Bluff	600,000
Establishing Applied Economics and Marketing Laboratory (AEM-Lab) Facilities at Aquaculture Fisheries Center, UAPB	University of Arkansas at Pine Bluff	138,195
Building an Interdisciplinary Educational Program on Food Safety for Fresh Fruits and Vegetables	University of Maryland Eastern Shore	299,997
BEAT (Bio-Energy Academy for Teachers) The Energy Crisis and Enhance BLT (Bio-Energy Literacy for Teachers)	University of Maryland Eastern Shore	149,777
Applied Research and Field Experiments using Variable Rate Nitrogen Application, Remote and in Situ Sensing, and Drought Tolerant Corn Seeds	University of Maryland Eastern Shore	299,994
Integrating Poultry House Heating and Nitrogen Management with Biofilters and Biofertilizer Production	University of Maryland Eastern Shore	600,000
Science and Technology Based Literacy Training Among Youth and Communities on Maryland's Eastern Shore	University of Maryland Eastern Shore	349,392
Increasing Undergraduate Enrollment in the Department of Agriculture at Virginia State University	Virginia State University	150,000
Student Experiential Learning in Sustainable Agriculture Tourism, a "Think Globally, Act Locally" Approach	Virginia State University	149,985
VSU Outreach and Technical Assistance Program for Strengthening the Capacity of Virginia's Limited Resource Producers	Virginia State University	428,112
Development of an Integrated Urban Forest Management Program	Virginia State University	599,750
Virginia State University Multicultural Scholars' Special Experiential Learning Program	Virginia State University	12,000
Biotechnology and Crop Biodiversity as Recruiting Tools: Linking High School Science with Ongoing Research	West Virginia State University	149,583
Engaging Students in Global Genomic Research Through CGIAR Visits and Independent Next-Generation Sequencing Projects	West Virginia State University	299,811
Application of Genomic Technologies for Appalachian Mine Soil Reclamation	West Virginia State University	242,954
Genome-Wide Association Mapping for Improving Nutraceutical Traits in Pumpkin and Squash	West Virginia State University	299,832
Understanding Segregation Distortion and Reproductive Barriers Improves Breeders Ability	West Virginia State University	299,734

Purpose	Recipient	Amount
to Transfer Traits from Wild Species to Cultivated		
FY 2013		
Building Global Competence and Collaborations through Student Experimental Learning and Faculty Exchange in China	Alabama A&M University	250,000
Promoting Meat Goat Production Among Minority Farmers	Alabama A&M University	349,293
Training of Minority Students in Nutrigenomics	Alabama A&M University	149,801
Geospatial Education and Research Center (GERC) to Strengthen Environmental and Natural Resources Sciences Programs	Alabama A&M University	599,299
Biological and Environmental Science (BES) Scholars @ AAMU: Demonstrating Excellence and Strengthening Training in Agricultural Sciences	Alabama A&M University	149,950
Technology Enhancing Exercise and Nutrition (TEEN) Program	Alabama A&M University	200,000
Career Development in Animal Science thru Experiential Learning: Artificial Insemination and Embryo Transfer.	Alcorn State University	149,946
Economic Assessment of Small-scale commercial goat farming systems in Southwest and Central Mississippi	Alcorn State University	249,262
Developing a Coordinated Program in Dietetics at DSU	Delaware State University	149,959
Optimization of Physiocochemical and Sensory Properties of Reduced-Cholesterol Butter and Cheese	Delaware State University	299,938
Expanding Agribusiness Opportunities to Under served Urban Communities using Cooperative Extension Programs; Program will increase outreach	Delaware State University	202,394
Delaware State University Mobil Meat Processing Lab Curriculum Development and Implementation	Delaware State University	249,974
Empowering the Next Generation of Food and Nutrition Scientists through Genomics.	Delaware State University	599,992
Improving Nutraceutical Value of Muscadine Grapes to Promote Consumer Health, Increase Market Value and Grower Profit	Florida A&M University	300,000
Creating a Public Private Consortium for the Enhanced Preparation of Students for Careers in the Food Industry	Florida A&M University	147,696
Developing a Sustainable Bioenergy System: Paulownia Production for Fuel, Chemicals, and Materials	Fort Valley State University	499,744

Purpose	Recipient	Amount
Cultivating Agriculture's Future Workforce Using the Emerging Leaders Interactive Training and Experience Program	Fort Valley State University	249,140
Strengthening Instrumental Analytical Techniques of Undergraduate and Graduate Students in Food and Agricultural Sciences	Fort Valley State University	143,000
Fort Valley State University Rural Sustainable 4-H Technology and Obesity Prevention project	Fort Valley State University	248,300
Veterinary Technology Degrees and Extension Veterinary Small Ruminant Initiative	Kentucky State University	519,998
Establishing a Family and Consumer Sciences Degree	Kentucky State University	520,000
Strengthening Environmental Science Program for Preparing Minority Young Scientists for the 21st Century	Kentucky State University	149,999
Evaluation and Development of Aquaponics as a Potential Source of Fresh and Safe Vegetables and Fish for Urban Minority Populations	Kentucky State University	504,640
Genomics of Resilience in Sheep to Climatic Stressors	Langston University	600,000
Students Training Students: Educating Tomorrow's Consumers Today	Lincoln University	149,991
Prediction and Control of the Performance of Anaerobic Digestion of Animal Manure through Metagenomics for Renewable Energy	Lincoln University	499,873
Hydrologic Regime and Nitrogen Cycling: Understanding the Difference between Claypan and Loess Watersheds in Missouri	Lincoln University	499,340
Collaboration with K-12 Institutions and Community Colleges to Enhance Recruitment and Retention in Agriculture and Environmental Sciences	Lincoln University in Missouri	149,816
A Biorefinery For The Production Of Biodiesel And Organic Fertilizers From Microalgae Grown On Swine Wastewater	North Carolina A & T State University	299,149
Safety Evaluation and Improvement of Grape Pomace as a Food Ingredient	North Carolina A & T State University	299,481
Immunotechnology- A Tool for Securing Food for Tomorrow	North Carolina A & T State University	132,732
Developing 21st Century Technologically Savvy Agricultural Professionals	North Carolina A & T State University	149,265
The Small Farm Resource Hub: Sustainable Agriculture Online Resources and Training for 1890 Extension Staff	North Carolina A & T State University	249,998

Purpose	Recipient	Amount
Creating an Instructional Laboratory to Enhance Student Participation in Research Experiences in Food Science and Dietetics	North Carolina A & T State University	149,741
Development of Wheat Bread Enriched with Microfluidized Corn and Oat Brans	North Carolina A & T State University	237,560
Establishing a Novel Livestock Diagnostic Information Delivery System	Prairie View A&M University	249,251
Quantifying the Net Effect of Urban Wetlands in Mitigating Greenhouse Gas Emissions in Louisiana	Southern University	284,876
Specialty Mushroom as a Niche Market Crop for Limited Resource Family Farms	Southern University	500,000
Economically Sustaining and Developing Community Gardens Through Innovative Technology	Southern University	249,999
Building Opportunities through Leadership Development	Southern University	250,000
Biofuel Education and Training Program with Infusion of Foundation Concepts and Outreach	Tennessee State University	150,000
Behavioral-based control methods for ambrosia beetle management in ornamental nurseries	Tennessee State University	299,751
Development and Validation of Novel Nanoparticles for Detection of Campylobacter	Tennessee State University	299,999
Effects of Global Warming and Precipitation on Switchgrass Biomass and Greenhouse Gas Emission	Tennessee State University	299,874
Assisting Parents to Purchase (APP) for Children's Health	Tennessee State University	248,886
A Parking Lot on Grandpa's Farm	Tennessee State University	249,797
Nashville Children Eating Well for Health	Tennessee State University	969,704
Implementing the Agricultural and Environmental Sciences Doctoral Program at Tuskegee University	Tuskegee University	149,991
Infrastructure Enhancement for the New Interdisciplinary Pathobiology PhD & Teaching Nanobiotechnology to Veterinary & Graduate Students	Tuskegee University	150,000
Enhancing Sustainable Livestock Production through Pasture Improvement and Grazing/Browsing Management	Tuskegee University	599,979
Strengthening Food Science through Experiential Learning for Middle School Youth	Tuskegee University	350,000
Preschoolers Jump-Start on Healthy Lifestyle Program in the Tri-County Area of the Maryland's Lower Eastern Shore	University of Maryland Eastern Shore	250,000
Strategies to Raise Hair Sheep Lambs for Specialty Markets on Pasture	Virginia State University	299,305
Fabrication and Characterization of Antimicrobial Biodegradable Nanocomposite Films for Food Packaging Application	Virginia State University	291,165

Purpose	Recipient	Amount
Chesapeake Bay Climate Study Partnership for Sustainable Agriculture	Virginia State University	300,000
Diversifying the Watermelon Cultivar Genetic Base using Genomic Selection to Improve Nutraceutical Traits and use Them as Parental Lines	West Virginia State University	444,346
Summer Academy of Plant Breeding: A Platform to Develop Minority Workforce in Molecular Plant Breeding	West Virginia State University	120,000
Learning and Teaching Biological & Agricultural Science Online: Increasing Success through Comprehensive Training, Development, and Research	West Virginia State University	533,674
4-H Planters	West Virginia State University	598,556

Agriculture and Food Research Initiative

Mr. Aderholt: Please update the table provided in the fiscal year 2014 hearing record of grants by category made through AFRI for fiscal years 2009 through 2013.

Response: The information on the number of grants by category made through AFRI for fiscal years 2009 through 2013 awards is provided for the record.

[The information follows:]

Plant Health and Production and Plant Products (Obligations)		
Fiscal Year	Number	Amount
2009	177	\$66,421,747
2010	143	71,969,763
2011	105	72,371,572
2012	63	39,270,328
2013	81	67,499,093
Total	569	317,532,503

Animal Health and Production and Animal Products (Obligations)		
Fiscal Year	Number	Amount
2009	125	\$51,080,158
2010	84	43,669,312
2011	42	19,776,241
2012	60	40,905,515
2013	41	15,285,200
Total	352	170,716,426

Food Safety, Nutrition, and Health (Obligations)		
Fiscal Year	Number	Amount
2009	62	\$30,087,370
2010	65	43,492,780
2011	67	89,371,838
2012	61	33,791,521
2013	63	28,401,082
Total	318	225,144,591

Renewable Energy, Natural Resources, and Environment (Obligations)		
Fiscal Year	Number	Amount
2009	77	\$21,441,628
2010	77	54,188,570
2011	59	31,951,171
2012	64	60,376,548
2013	56	22,220,736
Total	333	190,178,653

Agriculture Systems and Technology (Obligations)		
Fiscal Year	Number	Amount
2009	24	\$9,052,632
2010	26	15,643,888
2011	29	22,425,521
2012	5	4,001,596
2013	7	3,497,981
Total	91	54,621,618

Agriculture Economics And Rural Communities (Obligations)		
Fiscal Year	Number	Amount
2009	22	\$6,944,830
2010	28	17,449,922
2011	38	30,856,394
2012	10	3,399,854
2013	0	0
Total	98	58,651,000

Total (Obligations)		
Fiscal Year	Number	Amount
2009	487	\$185,028,365
2010	423	246,414,235
2011	340	266,752,737
2012	263	181,745,362
2013	248	136,904,092
Total	1,761	1,016,844,791

AFRI Awards to ARS Researchers

Mr. Aderholt: Please provide the list of AFRI grants awarded to ARS researchers for fiscal year 2013.

Response: There were six AFRI awards provided to ARS researchers with funds appropriated in fiscal year 2013.

[The information follows:]

APPROP FY	PROGRAM NAME	PROPOSAL NUMBER	RECIPIENT	MAIN PRIORITY NAME	AWARD AMT
2013	Plant Health and Production and Plant Products: Plant Breeding for Agricultural Production	2013- 01846	USDA-ARS	Plant health and production and plant products	\$500,000
2013	Plant Health and Production and Plant Products: Plant Breeding for Agricultural Production	2013- 02123	USDA-ARS	Plant health and production and plant products	\$500,000
2013	Agriculture Systems and Technology: Engineering Products and Processes	2013- 01328	USDA-ARS	Agriculture systems and technology	\$499,814
2013	Foundational Program: Microbial Communities in Soil	2013- 02755	USDA-ARS	Renewable energy, natural resources, and environment	\$460,000
2013	Foundational Program: Microbial Communities in Soil	2013- 02824	USDA-ARS	Renewable energy, natural resources, and environment	\$499,000
2013	Agriculture Systems and Technology: Engineering Products and Processes	2013- 01367	USDA-ARS	Agriculture systems and technology	\$190,696
Total					\$2,649,510

Extension Programs

Mr. Aderholt: Please update the chart provided in the fiscal year 2014 hearing record showing funding by category for NIFA's extension programs for fiscal years 2009 through 2013.

Response: The information is provided for the record.

[The information follows:]

EXTENSION PROGRAM FUNDING

Program	Fiscal Year 2009	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013
Smith Lever Formula 3(b)&c	\$288,548,000	\$297,500,000	\$293,911,000	\$294,000,000	\$271,269,447
1890 Institutions	40,150,000	42,677,000	42,591,646	42,592,000	39,299,008
Smith-Lever 3(d) Programs:					
Expanded Food and Nutrition Education Program	66,155,000	68,070,000	67,933,860	67,934,000	62,681,696
Pest Management	9,791,000	9,938,000	9,918,124	9,918,000	9,151,192
Farm Safety	4,863,000	4,863,000	4,853,274	0	0
Farm Safety and Youth Farm Safety Ed. & Cert.	0	0	0	4,610,000	4,253,579
New Technologies for Ag Extension	1,500,000	1,750,000	1,746,500	1,550,000	1,430,162
Children, Youth, and Families at Risk	8,182,000	8,412,000	8,395,176	7,600,000	7,012,408
Youth Farm Safety Education and Certification	479,000	486,000	485,028	0	0
Sustainable Agriculture	4,568,000	4,705,000	4,695,590	4,696,000	4,332,930
Federally-Recognized Tribes Extension	3,000,000	3,045,000	3,038,910	3,039,000	2,804,041
Extension Services at the 1994 Institutions	3,321,000	4,321,000	4,312,358	4,312,000	3,978,618
Renewable Resources Extension Act	4,008,000	4,068,000	4,059,864	3,700,000	3,413,935
Rural Health and Safety	1,738,000	1,738,000	1,734,524	1,500,000	1,384,027
1890 Facilities (Sec. 1497)	18,000,000	19,770,000	19,730,460	19,730,000	18,204,579
Grants for Youth Serving Institutions	1,767,000	1,784,000	1,780,432	750,000	672,638
Food Animal Residue Avoidance Database	806,000	1,000,000	995,000	1,000,000	922,685
Women and Minorities in STEM Fields	0	400,000	399,200	400,000	369,074
Federal Administration:					
Other	9,388,000	11,831,000	0	0	0
General Admin (Including Pay cost)	7,433,000	8,012,000	7,995,976	7,300,000	7,374,101
Ag in the Classroom	553,000	553,000	551,894	552,000	509,322
Total, Extension Activities	\$474,250,000	\$494,923,000	\$479,131,816	\$475,183,000	\$439,063,442

Integrated Activities

Mr. Aderholt: Please update the chart provided in fiscal year 2014 hearing record showing funding by category, recipient(s) and location of recipient(s) for NIFA's integrated research program for fiscal year 2013.

Response: The information is submitted for the record. Recipient data for FY 2009 through FY 2013 is provided.

[The information follows:]

Program Name	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Rural Development Centers	\$1,312,000	\$1,312,000	\$998,000	\$998,000	\$920,769
Water Quality	12,649,000	12,649,000	8,982,000	4,500,000	4,151,765
Food Safety	14,596,000	14,596,000	10,978,000	-	-
Regional Pest Management Centers	4,096,000	4,096,000	2,994,000	4,000,000	3,690,457
Crops at Risk from FQPA Implementation	1,365,000	1,365,000	-	-	-
FQPA Risk Mitigation Program for Major Food Crop Systems	4,388,000	4,388,000	-	-	-
Methyl Bromide Transition Program	3,054,000	3,054,000	1,996,000	1,996,000	1,841,537
Organic Transition Program	1,842,000	5,000,000	3,992,000	4,000,000	3,690,457
International Science and Education Grants	3,000,000	3,000,000	998,000	-	-
Critical Issues - Plant and Animal Diseases	732,000	732,000	-	-	-
Homeland Security	9,830,000	9,830,000	5,988,000	5,988,000	5,524,615
Subtotal (Discretionary Programs)	\$56,864,000	\$60,022,000	\$36,926,000	\$21,482,000	\$19,819,600
Organic Agricultural Research and Extension Initiative	18,000,000	20,000,000	20,000,000	20,000,000	-
Specialty Crops, Research Initiative	50,000,000	50,000,000	50,000,000	50,000,000	-
Total	\$124,864,000	\$130,022,000	\$106,926,000	\$91,482,000	\$19,819,600

*Funding above shows appropriated funds.

**Funding tables below do not include legislative set asides for NIFA.

Rural Development Centers (RDC)

Institution; Location	FY 2009 Amount	FY 2010 Amount	FY 2011 Amount	FY 2012 Amount	FY 2013 Amount	Title
Utah State U.; UT	\$312,256	\$312,256	\$237,524	\$237,444	\$218,996	Western RDC
Pennsylvania State U.; PA	312,256	312,256	237,524	237,444	218,996	Northeast Regional RDC
Michigan State U.; MI	312,256	312,256	237,524	237,445	218,996	North Central Regional RDC
Mississippi State U.; MS	312,256	312,256	237,524	237,444	218,995	Southern RDC
	<u>\$1,249,024</u>	<u>\$1,249,024</u>	<u>\$950,096</u>	<u>\$949,777</u>	<u>\$875,983</u>	

Water Quality FY 2009		
Institution; Location	Amount	Title
Colorado State U.; CO	\$67,000	Coordinated Regional Water Resources Programming for the Northern Plains and Mountains Region
Colorado State U.; CO	600,000	Coordinated Regional Water Resources Programming for the Northern Plains and Mountains Region
Iowa State U.; IA	575,000	Heartland Regional Water Coordination Initiative

Water Quality FY 2009 Institution; Location	Amount	Title
U. of Maryland; MD	600,000	Mid-Atlantic Water Program
Texas AgriLife Extension Service; TX	1,270,000	Sothern Region Water Resource Project
U. of Wisconsin, Madison; WI	610,000	Continuing Support for the Great Lakes Regional Water Program
University of Idaho; ID	595,000	Coordination, Development & Delivery of Water Resources Programs in the Pacific Northwest
U. of Rhode Island; RI	1,090,000	Northeast States and Caribbean Islands
U. of Idaho; ID	154,672	Synthesis and Analysis of 13 CSREES CEAP Projects
South Dakota State U.; SD	645,788	Conservation Practices Assessment of the Lower Bad River Basin
Board of Regents of the U. of Wisconsin System UW-Extension; WI	143,000	Mapping the Future: Youth-Water Programming for the 21st Century
Purdue U.; IN	300,000	Impact of Biofeedstock Production on Hydrology/Water Quality in Midwest and Southeast USA
Arizona Board of Regents, U. of Arizona; AZ	550,000	Southwest States & Pacific Island
Board of Regents, U. of Nebraska, Lincoln; NE	544,500	Improving and Conserving Water Resources through Stormwater Management Education for Community Decision Makers of Today and Tomorrow
Pennsylvania State U.; PA	240,000	Innovation in Youth Water Education in Pennsylvania Priority Watersheds
Board of Trustees of the U. of Illinois; IL	660,000	Reducing Nitrate Losses in Tile- Drained Agricultural Watersheds
North Carolina State U.; NC	228,000	Robeson Creek Water Quality Outreach Initiative
Colorado State U.; CO	615,000	Multi Criteria Decision Tool for the Assessment and Planning of Watershed Management Practices
U. of Connecticut; CT	385,000	Support of NIWQP Research, Education & Extension Outreach through Geospatial Technology Training
Board of Regents of the U. of Wisconsin System; WI	629,000	Tools Integrating Landuser Management Decisions with Watershed Processes to Achieve Water Quality Goals
Washington State U.; WA	566,610	Protecting Water Resources by Engaging Stakeholders in Targeted Implementation of Filter Strips
Kansas State U.; KS	114,000	Environmental Leadership Interdisciplinary Curriculum to Address Water Resources
U. of Tennessee; TN	652,000	Enhancing Water Quality in Oostanuala Watershed

Water Quality FY 2009		
Institution; Location	Amount	Title
Iowa State U.; IA	<u>165,459</u>	Enhancing Farmland Water Quality & Availability through Soli- Building Crop Rotations & Organic Practices
Total	<u>12,000,029</u>	

FY 2010		
Institution; Location	Amount	Title
Colorado State U.; CO	1,225,000	Northern Plains and Mountains Region
U. of Wisconsin, Madison; WI	1,235,000	Continuing Support for the Great Lakes Regional Water Program
Arizona Board of Regents, U. of Arizona; AZ	1,145,000	Southwest States & Pacific Islands
U. of Maryland; MD	1,200,000	Mid-Atlantic Water Program
U. of Rhode Island; RI	2,226,848	Northeast States and Caribbean Islands
Iowa State U.; IA	1,150,000	Heartland Regional Water Coordination Initiative
U. of Idaho; ID	1,190,000	Continuing Support for the Great Lakes Regional Water Program
Texas AgriLife Extension Service; TX	2,670,000	The Southern Region Water Resource Project
Total	<u>12,041,848</u>	

FY 2011		
Institution; Location	Amount	Title
U. of Florida; FL	395,000	Developing Tools to Attenuate Emerging Contaminants in Onsite Wastewater Treatment Systems
U. of Florida; FL	398,800	Smart Irrigation: Smartphone technology for managing urban and agricultural irrigation
Purdue U.; IN	395,000	Mobile Computing Technologies to Enable More Efficient Water Management Decisions in the Field
Colorado State U.; CO	365,000	Mobile irrigation water management system using eRAMs cloud computing infrastructure
Colorado State U.; CO	149,000	Agricultural Water Security in the Colorado River Basin: Planning for Water Research, Extension, and Education
U. of Rhode Island; RI	495,000	Efficacy, Constraints and Uncertainties of Constructed Wetlands and Bioreactors: A place-based, integrated approach to foster N abatement

FY 2011 Institution; Location	Amount	Title
Iowa State U. of Science and Technology; IA	280,909	Nitrogen Retention and Greenhouse Gas Fluxes of Constructed wetlands in Agricultural Watersheds within the Upper Mississippi River Basin
U. of Wisconsin, Madison; WI	2,400,000	Water Equals National Education Campaign: Transforming Young People's Relationship with Water
Montana State U.; MT	598,500	Water Quality Best Management Practices in the Judith River watershed: use of adaptive research and outreach to improve adoption
U. of Georgia Research Foundation, Inc.; GA	567,000	Impacts of On-site Wastewater Treatment Systems on Water Quality and Quantity in Urbanizing Watersheds
U. of Delaware; DE	595,000	Water Quality and ecosystem services from landscape best management practices that enhance vegetation in urbanizing watersheds
North Carolina State U.; NC	595,000	Analysis of Conservation Practice Effectiveness and Producer Adoption Behavior in Lake Jordan Watershed, NC
Kansas State U.; KS	570,000	Measuring Success of Targeted BMP Implementation and Getting Smarter about Ephemeral Gully Sediment and Nutrient Sources and BMPs
Mississippi State U. of Agriculture & Applied Science; MS	445,000	Downstream Water Quality and Quantity Impacts of Water Storage Systems in Porter Bayou Watershed
California Polytechnic State U.	234,865	Integrating remote sensing of evapotranspiration with surface and groundwater information to target potential water conservation projects
Colorado State U.	17,000	Coordinated Regional Water Resources Programming for the Northern Plains and Mountains Region
Total	<u>8,501,074</u>	

FY 2012 Institution; Location	Amount	Title
U. of Vermont and State Agricultural College; VT	394,000	goCrop: Integration of Mobile to Enhance Nutrient Management Program Implementation

FY 2012 Institution; Location	Amount	Title
U. of Minnesota; MN	314,000	A Management Tool for Small Community Onsite Wastewater Treatment Systems: The Community System Owner's Guide
U. of Tennessee; TN	633,400	Watershed Scale Project in Oostanaula Creek
U. of Maryland; MD	631,500	Watershed Diagnostics for Improved Adoption of Management Practices: Integrating Biophysical and Social Factors
Curators of the U. of Missouri; MO	414,000	Factors Affecting Adoption of Nutrient Management Practices By Farmers and Homeowners
Iowa State U. of Science and Technology; IA	621,000	An Integrated approach to precision conservation planning in the South Fork Watershed
Ohio State U.; OH	660,000	An Integrated Approach to Foster Science-Based Management of Agricultural Drainage Channels in the Western Lake Erie Basin
Oregon State U.; OR	588,229	Reducing Bacterial Contamination in the Tillamook Estuary Through Performanced-based Incentives
Total	4,256,129	

FY 2013 Institution; Location	Amount	Title
U. of Connecticut; CT	333,058	Expanding Consumer and Community Water Protection Efforts through Innovative and Integrated Mobile Technologies
U. of Massachusetts Amherst; MA	640,000	Farms, floods and fluvial geomorphology: making the most of our natural resources
Michigan State U.; MI	640,000	An Integrative Decision Support System for Managing Water Resources under Increased Climate Variability
U. of Florida Board of Trustees; FL	412,000	Smart Phone Apps: Scientific Validation Quantification of Water Conservation
U. of Massachusetts Amherst; MA	202,000	Advancing agricultural water security and resilience under nonstationarity and uncertainty: Evolving roles of blue, green and grey water
Colorado State U.; CO	649,000	Moving Forward on Agricultural Water Conservation in the Colorado River Basin
Oklahoma State U.; OK	638,000	Implementation of In-Stream,

FY 2013 Institution; Location	Amount	Title
		Streambank and Riparian Practices in Conjunction with Upland Practices for Conservation of Water Resources
Cornell U.; NY	429,000	Advancing Climate-Adaptive Decision Tools to Reduce Nutrient Pollution from Agricultural Fields
Total	3,943,058	

Food Safety FY 2009 Institution; Location	Amount	Title
Rutgers, The State U. of New Jersey; NJ	600,000	Peer Networking & Social Norms Design
Cornell u.; NY	591,732	Improving the Safety of Acidified & Acid Foods Produced by Small-scale Food Processors in the Northeast
Drexel U.; PA	598,752	Identifying & Addressing Potential Poultry & Egg Mishandling Habits of Minority Ethnic & Racial Populations
Alabama State U.; AL	599,999	Food Safety Education for Early Childhood Educators & Young Children
Ohio State U.; OH	597,841	Enhancement of Educational & Extension Communications for the Prevention of Milkborne Diseases
Tennessee State U.; TN	599,868	Innovation Approach for Integrating health Care Providers into Food Borne Illness Prevention for Older Adults
U. of California, Davis; CA	595,589	Evaluation & Application of Practices for Controlling Salmonella in Nuts & Nut Products
U. of Illinois at Chicago; IL	599,999	Menu for AIDS Patients to Eat Safely
Michigan State U.; MI	599,939	Foodborne Norovirus in Elder Care Facilities
U. of Tennessee; TN	596,287	Investigating Food Safety Self-Efficacy in Adolescent Populations
U. of Minnesota; MN	600,000	Development of an Integrated Multi-Level Food Safety Training Program for Spanish-Speaking Food Service Workers.
Iowa State U.; IA	598,607	Customization of Food Safety

FY 2009 Institution; Location	Amount	Title
		Messaging for Retail foodservice Employees
U. of Georgia; GA	598,541	Enhancing the Safety of Locally Grown Produce Through Research and Extension
U. of Florida; FL	597,808	Integrated Needs Assessment & National Training Program to Enhance Seafood & Aquaculture Product Safety
Board of Regents, U. of Nebraska, Lincoln; NE	599,992	Food Safety Assistance for Small Meat & Poultry Processor
California Polytechnic State U.; CA	596,029	Predictive Growth Models for Escherichia coli 0157:H7 on Fresh-Cut Produce during Transport & Cold Chain Distribution
Colorado State U.; CO	1,084,429	Quantifying Microbial Risks during Growth of Produce
Ohio State U.; OH	999,989	Pathogen Inactivation in Fresh Produce
U. of Maryland; MD	599,924	Online Integrated Food Safety Risk Analysis Resource to Facilitate National & International Information Exchange
Board of Regents of the U. of Wisconsin System; WI	600,000	Modeling Persistence of Non-0157 Shiga Toxin-Producing Escherichia coli in Beef Slaughter & Validation of Interventions Used in Processing
Oklahoma State U.; OK	968,497	Filth Fly Transmission of Human Enteric Bacteria to Pre-harvest Fresh Product
Total	<u>13,823,822</u>	

FY 2010 Institution; Location	Amount	Title
U. of California, Davis; CA	50,000	Center for Produce Safety Research Symposium
U of Illinois at Chicago; IL	600,000	Evidence-based Photovovella to Encourage Safe Meat Handling & Cooking Practices among Low Socio-economic Status African Americans
Rutgers, The State U. of New Jersey; NJ	600,000	Improving the Safety & Nutritional Adequacy of the Home Food Supply of Elderly Recipients

FY 2010 Institution; Location	Amount	Title
		of Home Delivered Meals
Purdue U.; IN	600,000	Helping Childbearing-Aged Women Make Informed Decisions Regarding Seafood Consumption
Board of Regents, U of Nebraska, Lincoln; NE	554,302	Food Safety for Diverse Families with Young Children
Sea Star International LLC; AR	600,000	Minimizing the Risk of Lm Cross- Contamination of Deli Foods
Texas Woman's U.; TX	600,000	Integrated Strategies to Reduce Foodborne Illness & Food Allergic Reactions Associated with Independently Operated Restaurants
Cornell U.; NY	600,000	Assessing Risks & Implementing Food Safe Practices
U. of Florida; FL	600,000	Assessing Safety of Enteric Pathogens on Fresh Produce Ingredients Destined for Uncooked Sauces/Salsa
U. of Connecticut; CT	600,000	Reducing Egg-borne Outbreaks of Salmonella Enteritidis
Colorado State U.; CO	600,000	Foodborne Pathogen Persistence
Cornell U.; NY	520,005	Enhancing the Safety of Non- thermally Processed Apple Juice
Virginia Polytechnic Institute & State U.; VA	600,000	Enhancing Food Safety through an Integrated Education & Outreach Program using Principles of Risk Management
Texas A&M U.; TX	1,000,000	Role of Surface-related Factors on Contamination & Survival of Pathogens in Fresh Produce Grown in Texas & Mexico
Washington State U.; WA	2,000,000	Minimizing Antibiotic Resistance Transmission
Kansas State U.; KS	600,000	Assessment & Reduction of Produce Food Safety Risks in the School Foodservice System
U. of Delaware; DE	50,000	Framing the Message about Seafood for Consumers - A Consensus Building Workshop for Stakeholders
Ohio State U. Research Foundation; OH	1,000,000	An Integrated Approach to Prevent & Minimize Foodborne Enteric Viruses in Vegetables & Fruits
Kansas State U.; KS	<u>2,000,000</u>	Practical Interventions to Effectively Manage Antibiotic Resistance in Beef & Dairy Cattle Systems
Total	<u>13,774,307</u>	

FY 2011 Institution; Location	Amount	Title
U. of Massachusetts Amherst; MA	424,878	Food Safety from Farm and Garden to Preschool
U. of Tennessee; TN	542,977	Building Better Food Safety Education Programs: How Optimizing Fidelity of Implementation can Maximize Desired Outcomes
Clemson U.; SC	542,999	Hand Hygiene Promotion: An Essential Strategy for Preventing Foodborne Illness in Elementary Schools
Michigan State U.; MI	543,000	Development and Evaluation of Standardized Competency-Based Food Safety Education and Training Programs for the Food Industry
Board of Regents of the U. of Wisconsin; WI	541,313	Bridging the Gap: Integrated Research and Extension in Support of Small Food Processors of Acidified Canned Foods
Fort Valley State U.; GA	100,000	Cost-Effective Pathogen Reduction Strategies and Food Safety Training for Small and Very Small Meat Processors in Georgia
Texas Tech U.; TX	540,326	Solutions for the Food Safety Threat Posed by Salmonella in the Lymph Nodes of Cattle Presented for Harvest
Pennsylvania State U.; PA	542,607	Development of an Updated and Optimized Egg Quality Assurance Program to Minimize Salmonella Enteritidis Contamination of Shell Eggs
Tennessee State U.; TN	100,000	An Integrated Approach to control Methicillin-Resistant Staphylococcus aureus and Clostridium difficile from Limited Resource Poultry
North Carolina State U.; NC	541,621	Farm-Level Practices to Reduce Campylobacter Prevalence in Commercial Turkeys
Arizona Board of Regents, U. of Arizona; AZ	542,969	The role of biofilms as a reservoir for foodborne pathogens in irrigation systems
Michigan State U.; MI	542,824	Improving Process Validation Methods for Multiple Pasteurization Technologies Applied to Low-Moisture Foods
Oklahoma State U.; OK	543,000	Advancement of a whole-chain, stakeholder driven traceability system for agricultural commodities: Beef Cattle Pilot Demonstration
U. of Georgia; GA	535,725	National Center for Home Food

FY 2011 Institution; Location	Amount	Title
Michigan State U.; MI	1,809,934	Processing and Preservation Integrated Approach to Enhance the Microbial Safety of Fresh-Cut Fruits and Vegetables during Processing, Packaging, and Distribution
Ohio State U.; OH	1,864,665	Reducing the transmission of AMR organisms by wildlife within the food supply-a research, control, and outreach strategy
Tuskegee U.; AL	<u>100,000</u>	Foodborne Pathogens Detection and Education Sustainable Agriculture for Small Scale Producers
Total	<u>10,358,838</u>	

Regional Pest Management Centers (PMC)

Institution; Location	Amount FY 2009	Amount FY 2010	Amount FY 2011	Amount FY 2012	Amount FY 2013	Title
U. of California; CA	\$974,598	\$974,848	\$712,036	\$951,455	\$877,739	Western Integrated PMC Northeastern
Pennsylvania State U.; PA	974,598	974,848	712,036	951,455	877,738	Integrated PMC North Central
Board of Trustees of the U. of Illinois; IL	974,598	974,848	712,036	951,455	877,738	Integrated PMC
North Carolina State U.; NC	<u>974,598</u>	<u>974,848</u>	<u>712,036</u>	<u>951,455</u>	<u>877,738</u>	Southern Integrated PMC
Total	<u>\$3,898,392</u>	<u>\$3,898,392</u>	<u>\$2,848,144</u>	<u>\$3,805,820</u>	<u>\$3,510,953</u>	

Crops at Risk for FQPA Implementation FY 2009		
Institution; Location	Amount	Title
Michigan State U.; MI	\$554,558	Integrating Applied Insect Ecology into Blueberry Pest Management
Virginia Polytechnic Institute & State U.; VA	170,133	Integrated Management of Snap Bean Pythium Cottony Leak
Regents of the U. of California; CA	299,259	To Repel or Kill: A Population Ecology Approach to Developing a New Model for Horn Fly Management in Beef & Dairy Cattle Systems
Regents of the U. of California; CA	<u>260,309</u>	Management of Alfalfa Trap Crops to Prevent First Generation Lygus Bug Damage in California Strawberries
Total	<u>1,284,259</u>	

FY 2010 Institution; Location	Amount	Title
Cornell U.; NY	\$230,000	A Novel Extension/Education Experience in IPM Systems for Undergraduate and Graduate Students in Plant Pathology
Cornell U.; NY	330,995	Critical Research & Extension to Reduce Losses due to Strawberry Powdery Mildew
Montana State U.; MT	218,419	DNC Barcoding to Unlock the Puzzle of Wireworm Pest Identities in Northern Great Plains Region
U. of Florida; FL	<u>512,379</u>	Sustainable Approach for Integrated Management of Herbicide Resistant Hydrilla in the U.S.
Total	<u>1,291,793</u>	

FQPA Risk Mitigation Program for Major Food FY 2009 Institution; Location	Amount	Title
Regents of the U. of California; CA	\$627,600	Integrated Pest Management of the potato Psyllid & Candidatus Liberibacter Psyllaourous
U. of Wisconsin, Madison; WI	811,565	Advancing Sustainable Disease Management on Field Corn
Montana State U.; MT	668,820	Sheep Grazing as a Pest Management Tactic in a Minimum Till Rotational Cropping System
Washington State U.; WA	<u>2,048,490</u>	Area-wide Management of Potato Pests in the Pacific Northwest
Total	<u>4,156,475</u>	

FY 2010 Institution; Location	Amount	Title
Texas AgriLife Extension Service; TX	\$225,598	Internships to Develop IPM Professionals
Clemson U., SC	1,154,161	Innovative Nematode Management Strategies to Reduce Pesticide Usage While Enhancing Farm Profit & Environmental Quality
Washington State U.; WA	828,811	New Way of Managing Soil Borne Diseases of Raspberry in Western States
Oklahoma State U.; OK	<u>1,929,861</u>	Web-based IPM System for Winter Wheat
Total	<u>4,138,431</u>	

Methyl Bromide (MB) FY 2009 <u>Institution; Location</u>		
	<u>Amount</u>	<u>Title</u>
U. of Georgia; GA	\$448,910	Evaluation of Non-fumigant Pesticides as MB Alternatives
Pennsylvania State U.; PA	688,187	Phytosanitary Treatment to MB Fumigation for Wood
North Carolina State U.; NC	768,347	Integrated Management of Soilborne Pests in Strawberry and Vegetable Production Systems
Washington State U.; WA	696,339	Control of Fusarium Root Rot in Douglas-fir Seedling Nurseries
U. of Arkansas; AR	<u>290,145</u>	MB Alternatives for Yellow & Purple Nutsedge & Other Weeds in Tomato & Bell Pepper
Total	<u>2,891,928</u>	

FY 2010 <u>Institution; Location</u>		
	<u>Amount</u>	<u>Title</u>
Regents of U. of California; CA	\$500,000	Energy Efficient Steam Soil Disinfestation Systems for Flower and Strawberry
U. of Florida; FL	400,000	Large Scale Demonstration Trialing & Industry-wide Testing of MB Alternatives in Florida Strawberry
U. of Florida; FL	565,000	Multi-State Evaluation of Carbonated Fumigants and Low Permeable Tarps to Reduce Application Rate
Kansas State U.; KS	782,019	Evaluation, Integration, & Implementation of Non-Fumigation Based Pest Management Approaches
U. of Tennessee; TN	<u>643,177</u>	Advances Development & Implementation of Anaerobic Soil Disinfestation Technology
Total	<u>2,890,196</u>	

FY 2011 <u>Institution; Location</u>		
	<u>Amount</u>	<u>Title</u>
U. of Georgia; GA	174,831	Eliminating the Need for Fumigants in Southeastern Melon Production Using an Integrated Program of Heavy-Rye Residues Plus Herbicides
North Carolina State U.; NC	496,962	Advanced Systems for Integrated Management of Strawberry Soilborne Pests in the Southeast USA

FY 2011 Institution; Location	Amount	Title
Mississippi State U.; MI	499,701	Evaluation of methyl bromide alternatives for their efficacy at controlling pests of dry cured ham and aged cheese products
Arkansas State U.; AR	450,502	Integrated Pest Management Programs to Reduce Reliance on Methyl Bromide Fumigation in Rice Mills
U. of Florida; FL	272,226	Multi-state investigation into odor abatement and reduced application rates of a carbonated fumigant, dimethyl disulfide
Total	<u>1,894,222</u>	

FY 2012 Institution; Location	Amount	Title
Pennsylvania State U.; PA	477,265	Dielectric Heating as an Alternative Phytosanitary Treatment to Methyl Bromide for Quarantine and Preshipment of Wood in International Trade
Michigan State U.; MI	181,403	Methyl Bromide Transition Strategies for Fresh Market Vegetable Production in Regions with Temperate Climate and Narrow Growing Window
U. of Florida; FL	360,185	Improving the efficacy of Methyl Bromide Alternatives for small fruit and vegetable production in Florida
U. of Tennessee; TN	421,084	Overcoming Obstacles to Adoption of Anaerobic Soil Disinfestation
Regents of the U. of California; CA	455,000	Implementing Anaerobic Soil Disinfestation for soilborne disease control in Strawberries and Apple Nurseries
Total	<u>1,894,937</u>	

FY 2013 Institution; Location	Amount	Title
Regents of the U. of California; CA	331,775	Integrated fumigant and non-fumigant soil disinfestation systems for flower and strawberry
Kansas State U.; KS	500,000	Evaluation of New Strategies and Tactics to Manage Insect Pests in Mills
Kansas State U.; KS	479,946	Developing IPM with Methyl Bromide Alternatives for Protecting Southern Dry-Cured Ham
Regents of the U. of Idaho; ID	436,530	Overcoming Obstacles to Adoption of Anaerobic Soil Disinfestation
Total	<u>1,748,251</u>	

Organic Transition Program FY 2009 Institution; Location	Amount	Title
North Carolina State U.; NC	\$658,769	Water Quality Evaluation of Long-Term Organic & Conventional Vegetable Production
Ohio State U. Research Foundation; OH	659,527	Impacts of Organic Animal Production Systems on Water Quality & Quantity in Ohio
Iowa State U.; IA	<u>433,568</u>	Enhancing Farmland Water Quality and Availability
Total	<u>1,751,864</u>	

FY 2010 Institution; Location	Amount	Title
U. of Wisconsin; WI	\$436,894	Impact of Organic Management on Dairy Animal Health
U. of Wyoming; WY	700,000	Solid Carbon & Nitrogen Dynamics
U. of Illinois; IL	649,883	Organic Systems & Climate Change
Iowa State U.; IA	691,969	Effect of Cover Crops, Soil Amendments & Reduced Tillage on Carbon Sequestration
U. Of New Hampshire; NH	700,000	Greenhouse Gas Emissions in the Transition from Traditional to Organic Dairy Farming
U. of Florida; FL	624,148	Environmental & Economic Costs of Transitioning to Organic Production
Texas AgriLife Extension Service; TX	697,012	Integrating Community College Students & Organic Farmers
North Carolina State U.; NC	<u>251,161</u>	Evaluating the Potential of Winter Cover Crops for Carbon Sequestration in Degraded Soils
Total	<u>4,751,067</u>	

FY 2011 Institution; Location	Amount	Title
U. of Maryland; MD	403,777	Cover Crop and Tillage impact on Soil Quality, Greenhouse Gas Emission, Pests, and Economics of Fields Transitioning to Organic Farming
Washington State U.; WA	745,493	Greenhouse Gas Emissions and Soil Quality in Long-term Integrated and Transitional Reduced Tillage Organic Systems
Michigan State U.; MI	749,106	Effect of Cover Crops on Nitrous Oxide Emissions, Nitrogen Availability & Carbon Accumulation in Organic vs. Conventionally Managed Systems
U. of Missouri Bradford Research and Extension; MO	742,217	Identification of Factors Affecting Carbon Sequestration and Nitrous Oxide Emission in Three Organic Cropping Systems
Montana State U.; MT	742,907	Reducing tillage intensity in organic crop systems: ecological and economic impacts of targeted sheep grazing on cover crops, weeds & soil
North Carolina State U.; NC	399,745	Evaluating the potential of winter cover crops for carbon sequestration in degraded soils transitioning to organic production
North Dakota State U.; ND	736,244	Greenhouse Gas Emissions and Soil Quality in long-term integrated and transitional reduced tillage organic systems
Total	4,519,489	

FY 2012 Institution; Location	Amount	Title
Washington State U.; WA	695,078	Role of Mixed Crop-Livestock Systems in Transitioning to Dryland Organic Farming in the Pacific NorthWest
U. of Maryland; MD	716,773	Agricultural Greenhouse Warming Potential and Soil Carbon Sequestration in Organic and Long Term Rotational Systems
North Carolina State U.; NC	371,834	Assessing the greenhouse gas mitigation potential of organic systems in the Southeast
Cornell U.; NY	676,385	Optimizing cover crop selection and management to enhance agronomic and environmental services in organic cropping systems

FY 2012 Institution; Location	Amount	Title
Ohio State U.; OH	749,170	Assessing, Modeling, and Maximizing Ecosystem Services in Long-term Organic and Transitioning Farming Systems
Texas AgriLife Research & Extension Center at Beaumont; TX	255,004	Improving Soil Quality, C Sequestration, and Mitigating Greenhouse Gas Emission in Organic Rice Production
U. of Maryland; MD	332,716	Cover Crop and Tillage Impact on Soil Quality, Greenhouse Gas Emission, Pests, and Economics of Fields Transitioning to Organic Farming
Total	<u>3,796,960</u>	

FY 2013 Institution; Location	Amount	Title
U. of Texas - Pan American; TX	247,491	Subtropical Organic Agriculture Research (SOAR) Program: A Participatory Academic Program to Fill Knowledge Gaps for Organic Farmers
Washington State U.; WA	749,661	BAN PestS: Biodiversity and Natural Pest Suppression
Michigan State U.; MI	464,482	Organic management of fire blight in a post-antibiotic era: developing, evaluating, & delivering options for apples grown in humid climates
U. of Florida; FL	460,937	Improvement and Implementation of Organic Pecan Systems in the Southeastern US
Regents of the U. of Minnesota; MN	718,225	Principles for Transitioning to Organic Farming: e-Learning Materials and Decision Case Studies for Educators
North Carolina State U; NC	370,749	Assessing the greenhouse gas mitigation potential of organic systems in the Southeast
Texas AgriLife Research & Extension Center at Beaumont; TX	<u>471,888</u>	Cover Crop and Tillage Impact on Soil Quality, Greenhouse Gas Emission, Pests, and Economics of Fields Transitioning to Organic Farming
Total	<u>3,483,433</u>	

International Science and Education Grants FY 2009		
Institution; Location	Amount	Title
Purdue U.; IN	\$149,746	Multicultural Perspectives on Sustainable Agriculture
Cornell U.; NY	149,355	Enhancing Water Sustainability in a Water Scarc Region in Africa
Pennsylvania State U.; PA	149,993	Ag 2 Africa
U. of Georgia; GA	87,095	Croatia Agriculture Research & Educational Exchange
U. of Rhode Island; RI	149,723	Biodiversity Certification Models
Alabama A&M U.	149,958	Strengthen Minority in Global Perspectives
North Carolina A&T State U.; NC	149,261	Enhancing the International Agricultural Campus
Oregon State U.; OR	149,999	Proposal to Create a Quarter Abroad Program at Universidad Austral de Chile
Rutgers, The State U. of New Jersey; NJ	149,955	Integrating Teaching, Research & Extension in the Supply Chain of the Lentil Industry
Texas Tech U.; TX	149,572	Economic Research, Education & Outreach on the US & Brazilian Cotton Industries
Michigan State U.; MI	143,849	Michigan-French Partnership to Strengthen Global Competence in Ag & Tourism
Texas A&M U.; TX	149,999	Research, Education & Extension Program for Sustainable Manure Management Practices, Learning from the Belgian Model
West Texas A&M U.; TX	106,400	West Texas International Program in Systems Agriculture & Environmental Science
West Virginia U.; WV	125,187	Formalizing International Natural Resource Learning
U. of Minnesota; MN	148,871	Food Safety & Food Defense in the Americas
U. of Missouri; MO	139,905	Enhance International collaboration in Food Safety Education & Research to Combat Food Contamination through the Global Food Chain
Kansas State U.; KS	140,370	Understanding International Consumer Needs & Testing Strategies for Food Product Development
Mississippi State U.; MS	149,825	US-China Partnership
Clemson U.; SC	149,546	International Collaboration to Understand Molecular Mechanisms of Vegetative/Reproductive Transition in Gymnosperms
Tuskegee U.; AL	145,119	Strengthening Global Competence

International Science and Education Grants FY 2009		
Institution; Location	Amount	Title
		of Veterinary & Graduate Students
Auburn U.; AL	15,427	Sharpening US Global Agriculture Competitiveness via American-Spanish Research, Education & Extension
Total	2,849,155	

FY 2010		
Institution; Location	Amount	Title
Cornell U.; NY	\$149,764	The Global Agriculture Network
North Carolina A&T State U.; NC	149,973	Enhancing US agribusiness Expansion to Emerging Markets
Southern U. & A&M College; LA	150,000	Strengthening the Global Competence of Minority Students
Purdue U.; IN	150,000	Sub-Saharan Context for Internationalizing Crop, Soil, & Environmental Science Curricula
U. of Wyoming; WY	149,911	Opportunities for Education & Research Enhancements through Partnerships with New Zealand
U. of Florida; FL	150,000	International Alliance for Functional Food Research, Education, & Extension
East Carolina U.; NC	148,456	Strengthening the Global Competence of Faculty & Students through Partnership with China
U. of Arizona; AZ	149,258	Building Global Access to Sustainable Rangeland Management Resources for Research, Teaching, and Extension
Auburn U.; AL	134,560	Sharpening US Global Agriculture Competitiveness via American-Spanish Research, Education & Extension
U. of Nevada, Reno; NV	149,997	Global Changes in Arid Ecosystems
Michigan State U.; MI	149,975	Globalization of Food Systems Training Programs for Veterinary Students
Colorado State U.; CO	149,899	International Research & Education Collaboration with India and China in Agriculture & Precision Agriculture
Clemson U.; SC	148,058	Enhancing the Sustainability of Livestock Production Systems on the Southeastern US
U. of California; CA	147,454	Water Sustainability in Desert Agriculture
U. Kentucky; KY	150,000	Globalizing Agricultural Education

FY 2010 Institution; Location	Amount	Title
U. of Georgia; GA	150,000	TransAtlantic Precision Agriculture Consortium
Iowa State U.; IA	149,879	Preparing Current & Future Food and Ag Professionals for the US and China-Led Global Economy
U. of Wisconsin; WI	149,940	Understanding & Mitigating Potential Food Safety Risks on Dairy Farms in Kosovo and the US
U. of Delaware; DE	150,000	Agriculture's Global Challenges
U. of Missouri; MO	12,539	Internationalization of Forestry, Education, Research & Extension: US - Costa Rica Cooperation
Total	<u>2,839,663</u>	

FY 2011 Institution; Location	Amount	Title
Board of Regents, U. of Nebraska Lincoln; NE	149,579	It's All About TEF: Internationalizing Teaching, Extension and Farming Research in Ethiopia
Rutgers, State U. of New Jersey; NJ	98,937	Adaptation to Climate Change in Agriculture: Experience and Lessons from China
Curators of the U. of Missouri; MO	136,365	Internationalization of Forestry Education, Research and Extension: U.S. Costa Rica Cooperation
George Mason U.; VA	148,264	Enhancing Knowledgeable Agricultural Decision Support in Global Perspectives
Kansas State U.; KS	149,663	Raising the Global Intelligence Quotient of U.S. Workforce via Food Security and Agricultural Value Addition in Mozambique
U. of Georgia; GA	149,801	U.S. India Bioenergy Partnership
U. of South Carolina; SC	98,926	U.S. China Joint Program on Forestry Biomass Utilization for Sustainable Materials and Nanotechnologies
Total	<u>931,535</u>	

Critical Issues-Plant and Animal Disease FY 2009 Institution; Location	Amount	Title
Colorado State U.; CO	\$15,300	Monitoring for Thousand Cankers Disease of Juglans in Western US
Oregon State U.; OR	7,132	Rapid On-site Detection Method for <i>Vibrio tubiashii</i> in Shellfish Hatcheries
U. of Florida; FL	90,000	Improving Ambrosia Beetle Management by Understanding & Exploiting Beetle-host Interactions
Rutgers, The State U. of New Jersey; NJ	90,000	Biology, Distribution & Pest Status of the Brown Marmorated Stink Bug in Agronomic, Fruit & Vegetable Crops, & Urban Areas
Ohio State U.; OH	90,000	Determining the Distribution & Pest Status of the Trochanter Mealybug on Soybean
U. of Florida; FL	89,958	Management Strategies for the Red Bay Ambrosia Beetle on Avocado
Colorado State; CO	172,307	Management of Agricultural Animals in a Radiological or Nuclear Incident
Texas A&M U.; TX	<u>127,620</u>	Effective Contamination Detection for Livestock following a Radiological Event
Total	<u>682,317</u>	

FY 2010 Institution; Location	Amount	Title
Virginia Polytechnic Institute & State U.; VA	\$200,000	Development of DNA-based Nanoscale Optical Fiber Biosensor Assay to Detect <i>Brucella</i> Infections in Elk other Wildlife
U. of Florida; FL	131,122	Determining Host & Geographic Ranges of Groundnut Ringspot Virus in US Tomatoes
U. of Hawaii; HI	109,955	Post-harvest Management of Slugs & Snails Potentially Carrying Rate Lungworm in Hawaii
U. of California; CA	124,296	Host Susceptibility, Geographic Distribution, & Management of the Invasive <i>Bagrada</i> Bud in the US
Oklahoma State U.; OK	<u>113,649</u>	Time-critical Assessment of Potential Distribution of the <i>Bagrada</i> Bug
Total	<u>679,022</u>	

Homeland Security Recipient	Fiscal Year 2009	Fiscal Year 2010	Title
Cornell U.	984,410	830,000	Northeast Plant Diagnostic Network
Michigan State U.	830,350	942,780	North Central Plant Diagnostic Network
Purdue U.	248,250	250,000	National Database/National Network; Diagnostic Center
U. of California	830,350	830,000	Western Regional Center in the National Diagnostic Network
Murray State U.	50,000	50,000	National Animal Health Laboratory Network Georgia National Animal Health
U. of Georgia	298,000	298,000	Georgia National Animal Health Laboratory Network Program
Wyoming State Veterinary Laboratory	50,000	50,000	National Animal Health Laboratory Network
Utah State U.	50,000	50,000	National Animal Health Laboratory Network
U. of Florida	830,350	830,000	Southern Plant Diagnostic Network
Kansas State U.	830,350	830,000	Great Plains Diagnostic Network
AZ Board of Regents, U. of Arizona	298,000	298,000	National Animal Health Laboratory Network
State of Tennessee, Dept of Agriculture	50,000	50,000	National Animal Health Laboratory Network
U. of Nebraska	50,000	50,000	Further Integration of the Nebraska Vet., Diagnostic Ctr., into the Nat'l Animal Health Laboratory Network
U. of California	308,000	298,000	National Animal Health Laboratory Network
Washington State U.	308,000	308,000	Washington Animal Health Disease Diagnostic Laboratory
Cornell U.	298,000	298,000	National Animal Health Laboratory Network
U. of Minnesota	50,000	50,000	National Animal Health Laboratory Network
U. of Wisconsin-Madison	298,000	298,000	National Animal Health Laboratory Network
Iowa State U. of Science/Tech	298,000	298,000	National Animal Health Laboratory Network
Colorado State U.	298,000	298,000	National Animal Health Laboratory Network
Purdue U.	50,000	50,000	National Animal Health Laboratory Network
Purdue U.	485,000	499,000	EDEN Homeland Security Initiative
Oregon State U.	50,000	50,000	National Animal Health Laboratory Network
Mississippi State U.	50,000	50,000	National Animal Health Laboratory Network
Ohio Department of	50,000	50,000	ODA NAHLN Supplemental

Homeland Security Recipient	Fiscal Year 2009	Fiscal Year 2010	Title
Agriculture			Agreement for IT and Equipment Support
Louisiana State U.	298,000	298,000	National Animal Health Laboratory Network
Kansas State U.	50,000	50,000	National Animal Health Laboratory Network
South Dakota State U.	50,000	50,000	National Animal Health Laboratory Network
Florida Dept. of Agriculture/ Consumer Service	298,000	298,000	Homeland Security-Agricultural
NC Department of Agriculture/ Consumer Service	298,000	298,000	National Animal Health Laboratory Network
New Jersey Department of Agriculture	50,000	50,000	National Animal Health Laboratory Network
Texas Veterinary Medical Diagnostic Lab	298,000	298,000	National Animal Health Laboratory Network
New Mexico Department of Agriculture	50,000	50,000	New Mexico ALIRT Program
Michigan State U.	50,000	50,000	National Animal Health Laboratory Network
Pennsylvania Department of Agriculture	50,000	50,000	National Animal Health Laboratory Network
Total	9,435,060	9,397,780	

Homeland Security Recipient	Fiscal Year 2011	Fiscal Year 2012	Title
U. of Georgia Research Foundation, Inc.	182,000	182,000	(NAHLN) National Animal Health Laboratory Network, GA
Arizona Board of Regents, U. of Arizona	182,000	182,000	National Animal Health Laboratory Network: AZ
University of Wisconsin-Madison	182,000	182,000	NAHLN WI:2011
Ohio Department of Agriculture	31,000	31,000	ODA NAHLN supplemental agreement for IT and equipment support
State of Tennessee, USDA	31,000	31,000	NAHLN
Texas Veterinary Medical Diagnostic Laboratory	182,000	182,000	National Animal Health Laboratory Network (NAHLN) for the Food and Agriculture Defense Initiative
Oregon State University	31,000	31,000	NAHLN: OR
South Dakota State U.	31,000	31,000	NAHLN: SD
Board of Regents, U. of Nebraska Lincoln	31,000	31,000	Further Integration of the Nebraska Veterinary Diagnostic Center into the National Animal Health

Homeland Security Recipient	Fiscal Year 2011	Fiscal Year 2012	Title
Florida Department of Agriculture and Consumer Services	182,000	182,000	Homeland Security Agriculture
Purdue U.	304,575	305,000	EDEN Homeland Security Initiative VI: Strengthening EDEN's Role in Homeland Security, Food Ag Defense, and All-Hazard Education
North Carolina Department of Agriculture & Consumer Services	182,000	182,000	NAHLN: NC
Utah State U.	31,000	31,000	NAHLN: UT
Colorado State University	182,000	182,000	NAHLN: CO Animal Health Diagnostic Laboratory 2011-2012
Cornell University	182,000	182,000	National Animal Health Laboratory Network: NY
U. of Wyoming	31,000	31,000	NAHLN Testing University of Wyoming, Wyoming State Veterinary Laboratory
Washington State U.	182,000	182,000	Washington Animal Disease Diagnostic Laboratory Participation as a Core Laboratory in the National Animal Health Laboratory Network
U. of Minnesota	31,000	31,000	NAHLN: MN
Pennsylvania, USDA	31,000	31,000	NAHLN: PA
New Jersey, USDA	31,000	31,000	NAHLN NJ
Mississippi State U.	31,000	31,000	NAHLN: MS
Purdue U.	31,000	31,000	NAHLN Laboratory Network for the Food and Agriculture Defense Initiative
Regents, U. of California, Davis	182,000	182,000	NAHLN: CA
Louisiana State U.	182,000	182,000	NAHLN: LA
Michigan State U.	31,000	31,000	NAHLN: MI
Murray State U.	31,000	31,000	NAHLN: KY
Iowa State U. of Science and Technology	182,000	182,000	NAHLN: IA
New Mexico State U.	31,000	31,000	New Mexico Agriculture Livestock Incident Response Team
Kansas State U.	31,000	31,000	NAHLN: KS
Cornell U.	500,000	500,000	Northeast Plant Diagnostic Network
Purdue U.	175,000	175,000	NPDN National Database/National Network of Diagnostic Centers
Michigan State U.	575,425	575,940	North Central Plant Diagnostic Network
U. of Florida	500,000	500,000	Southern Plant Diagnostic Network

Homeland Security Recipient	Fiscal Year 2011	Fiscal Year 2012	Title
Regents of the U. of California	500,000	500,000	Western Regional Center in the National Plant Diagnostic Network
Kansas State U.	500,000	500,000	Great Plains Diagnostic Network
Total	5,735,000	5,735,940	

Homeland Security Recipient	Fiscal Year 2013	Title
U. of Georgia Research Foundation, Inc.	166,000	(NAHLN) National Animal Health Laboratory Network, GA
Kansas State U.	30,000	National Animal Health Laboratory Network: KS
Michigan State U.	520,400	North Central Plant Diagnostic Network: MI
Purdue U.	175,000	NPDN National Database/National Network of Diagnostic Centers, IN
Mississippi State U.	30,000	NAHLN; MS
State of Tennessee, Department of Agriculture	30,000	National Animal Health Laboratory Network (NAHLN); TN
North Carolina Department of Agriculture & Consumer Services	166,000	NAHLN: NC
WSU CVM Animal Health Center	166,000	Washington Animal Disease Diagnostic Laboratory Participation as a Core Laboratory in the National Animal Health Laboratory Network: WA
Oregon State U.	30,000	NAHLN: OR
U. of Florida Board of Trustees	452,400	Southern Plant Diagnostic Network: FL
Regents of the U. of California	452,400	Western Regional Center in the National Plant Diagnostic Network: CA
Cornell U.	487,400	Regional Center Plant Diagnostic Facility; NY
Kansas State U.	452,400	Great Plains Plant Diagnostic Network; KS
Colorado State U.	166,000	NAHLN: CO Animal Health Diagnostic Laboratory 2013-2014
Utah State U.	30,000	Utah Veterinary Diagnostic Laboratory's participation in the NAHLN: UT
Michigan State U.	30,000	NAHLN: MI
Board of Regents of the University of Wisconsin System	166,000	NAHLN: WI
South Dakota State U.	30,000	NAHLN: SD National Animal Health Laboratory Network: SD
Florida Department of Agriculture and Consumer Service	166,000	Homeland Security Agriculture
Board of Regents, U.	30,000	Continued Integration of the Nebraska

Homeland Security Recipient	Fiscal Year 2013	Title
of Nebraska, U. of Nebraska-Lincoln		Veterinary Diagnostic Center (VDC) into the National Animal Health Network: NE
U. of Wyoming	30,000	NAHLN Testing - U. of Wyoming, Wyoming State Veterinary Laboratory: WY
Purdue U.	30,000	NAHLN Laboratory Network for the Food and Agriculture Defense Initiative: NY
Texas A&M Veterinary Medical Diagnostic Laboratory	166,000	National Animal Health Laboratory Network (NAHLN) for the Food and Agriculture Defense Initiative: TX
Regents of the U. of Minnesota	30,000	Development of Automated Systems for Sequence Analysis and Reporting
Pennsylvania Department of Agriculture	30,000	NAHLN: PA
Cornell U.	166,000	NAHLN: NY
Arizona Board of Regents, U. of Arizona	166,000	NAHLN: AZ
Ohio Department of Agriculture	30,000	ODA NAHLN Supplemental agreement for IT and equipment support
Murray State U.	30,000	NAHLN: KY
Louisiana State U. and A&M College	166,000	National Animal Health Laboratory Network - NAHLN: LA
New Jersey Department of Agriculture	30,000	NAHLN: NJ
Regents of the U. of California	166,000	NAHLN: CA
Iowa State U. of Science and Technology	166,000	National Animal Health Laboratory Network Activities for Iowa State University; IA
Regents of New Mexico State U.	30,000	NM ALIRT (NM Ag/Livestock Incident Response Team); NM
Purdue U.	284,030	Homeland Security Initiative VI: Strengthening EDEN's Role in Homeland Security, Food and Ag Defense, and All Hazard Education; IN
Total	5,296,030	

Organic Research and Extension Initiative FY 2009 Institution; Location	Amount	Title
Cornell U.; NY	9894,069	Summer Cover Crops for Weed Suppression and Soil Quality in Organic Vegetable Production in the Great Lakes Region
Iowa State U. of Science and Technology; IA	1,047,024	Sustainable Systems for Cucurbit Crops on Organic Farms
The U. of Vermont and State Agricultural College; VT	946,675	Using New Alternatives to Enhance Adoption of Organic Apple Production through Integrated Research and Extension
Washington State U.; WA	46,794	No-till organic vegetable production in western Washington: A Planning Proposal
Regents of the University of	38,466	Integrated Organic Dairy Research and Extension planning

Organic Research and Extension Initiative FY 2009 Institution; Location	Amount	Title
Minnesota; MN		
Michigan State U.; MI	1,049,674	Practical Perennials: Partnering with farmers to develop a new type of wheat crop
North Carolina State U.; NC	1,174,942	Farmer Driven Breeding: Addressing the Needs of Southeastern Organic Field Crop Producers
Utah State U.; UT	637,519	Organic Stone-Fruit Production: Optimizing Water Use, Fertility, Pest Management, Fruit Quality and Economics
Cornell U.; NY	1,431,591	Building on success: a research and extension initiative to increase the prosperity of organic grain and vegetable farms
Organic Seed Alliance; WA	46,281	The Seed We Need Working Group, Symposium, and Action Plan for the Advancement of Organic Seed Systems
U. of Guam; GU	41,616	Training Conference to Develop Certification Inspectors to Enable organic Agriculture on Guam and the American Affiliated Pacific
Sustainable Agricultural Systems Lab; MD	759,480	On-Farm Research and Extension to support Sustainable Nutrient Management of Organic Grain Cropping Systems in the Mid-Atlantic Region
U. of Maine System acting through the U. of Maine; ME	1,320,378	Enhancing farmers capacity to produce high quality organic bread wheat
Oregon State U.; OR	522,108	Northern Organic Vegetable Improvement Cooperative
U. of Nebraska, Lincoln; NE	1,419,710	Improving Organic Farming Systems and Assessing their Environmental Impacts across Agroecoregions
Pennsylvania State U.; PA	538,415	Improving Weed and Insect Management in Organic Reduced - Tillage Cropping Systems
Washington State U.; WA	410,077	Plant breeding and agronomic research for organic hop production systems
U. of Hawaii; HI	47,500	Hua Ka Hua - Restore Our Seed: A symposium to develop a Hawaii Public Seed Initiative
The Ohio State U. Research Foundation; OH	1,089,190	Enhancing Productivity and Soilborne Disease Control in Intensive Organic Vegetable Production with Mixed - Species Green Manures
U. of Hawaii; HI	351,028	Vermicompost - based media to enhance organic vegetable seedling vigor, yield, crop quality and grower profitability
Regents of the U. of California; CA	372,135	Researcher and Farmer Innovation to Increase Nutrient Cycling on Organic Farms

Organic Research and Extension Initiative FY 2009 Institution; Location	Amount	Title
Washington State U.; WA	1,040,210	Sustainable Dryland Organic Farming Systems in the Pacific Northwest
The Ohio State U.; OH	470,696	Mental models and participatory research to redesign extension programming for organic weed management
Board of Regents, U. of Nebraska, U. of NE - Lincoln; NE	69,806	High Pressure Processing of natural, Organic, and Minimally-Processed Peanut Butter
The Board of Regents of the UW System; WI	541,172	Organic Certified Seed Potato Production in the Midwest
Oregon State University; OR	317,182	eOrganic: the National Online Information, Training, and Networking System for Organic Agriculture
U. of Wyoming; WY	574,621	Marketing opportunities and constraints confronting organic farming operations in the high plains
Total	\$17,198,359	

FY 2010 Institution; Location	Amount	Title
U. of Wisconsin, Madison; WI	\$574,621	Strategies of Pasture Supplementation on Organic and Conventional Grazing Dairies: Assessment of Economic, Production and Environment Outcomes
Utah State U.; UT	1,019,411	Improved Organic Milk Production through the Use of the Condensed Tannin-Containing Forage Legume Birdsfoot Trefoil
Texas A&M U.; TX	661,437	Development of Cultivars and IPM Strategies for Organic Cotton Production
USDA, Agricultural Research Service, Southern Plains Area; TX	967,916	A systems Approach to Control Gastrointestinal Nematodes in Organic Small Ruminant Production
Farmers Legal Action Group, Inc.; MN	109,200	Farmers Legal Action Group Production of an Organic Farmers Guide to Contracts
Michigan State U.; MI	963,762	Organic Dry Bean Production Systems
Michigan State U.; MI	188,531	Holistic Integration of Organic Strategies and High Tunnels for Midwest/Great Lakes Fruit Production
Purdue U.; IN	1,288,010	Economics, Ecology, Education: An Integrated Approach to Ensure the Success of Organic Vegetable Growers
South Dakota State U.; SD	43,809	Sustainable Organic Tribal Bison Production Using an Intra-Tribal Supply Chain Management System: A planning Grant Proposal
The University of Georgia Research Foundation, Inc.; GA	45,713	Low Energy Agro-Ecological Farming (LEAF)
USDA, Agricultural Research Service, Midwest Area; CO	49,666	Environmental sustainability of Organic Farming Systems: On-Farm, Experimental, and Watershed Assessments
University of New	31,372	Research and Extension Needs Assessment of

FY 2010 Institution; Location	Amount	Title
Hampshire; NH		the Organic Dairy Industry in the Northeast
Oregon State U.; OR	2,428,677	Organic Blackberry Production Systems for Improved Yield, Fruit Quality, and Food Safety in Fresh and Processed Markets
Regents of the U. of Idaho; ID	108,815	Host plant choice of Colorado potato beetle and variation in defoliation and yield losses among organically grown commercial potato varieties
The U. of Vermont and State Agricultural College; VT	759,516	Development of Tech. Training and Support for Ag. Service Providers & Farmers in Certified Organic Dairy Production Systems through eOrganic
The U. of Arizona; AZ	950,514	Improving the Safety and Quality of Organic Leafy Greens: Assessment of Good production Practices Along the Farm to Fork Continuum
U. of Maryland; MD	526,781	Using winter cover crops to enhance the organic vegetable industry in the mid-Atlantic region
Washington State U.; WA	1,538,115	Carbon Sequestration, Nutrient Bioavailability, and Environmental Services from Organic Agriculture
West Virginia U.; WV	31,344	Organic Sheep and Goats: Herd Health and Nutrition Planning Proposal for the Northeast US 2010
U. of Minnesota; MN	1,273,250	Tools for Organic Transition: Financial Data and Educational Resources for Farmers and Agricultural Professionals
The U. of Tennessee; TN	50,000	Pasteurization of High Quality Organic Fruit and Vegetable Juices using Nonthermal LTechnologies
The Board of Regents of the UW System; WI	658,735	Crop Plant Nutrition and Insect Response in Organic Field Crop Production: Linking Farmer Observation to University Research and Extension
Iowa State U.; IA	2,864,478	Strengthening public corn breeding to ensure that organic farmers have access to elite cultivars
Pennsylvania State U.; PA	678,797	Improving Weed and Insect Management in Organic Reduced-Tillage Cropping Systems
Oregon State U.; OR	620,066	Northern Organic Vegetable Improvement Collaborative (NOVIC)
The Ohio State U.; OH	684,496	Mental Models and Participatory Research to Redesign Extension Programming for Organic Weed Management
Total	<u>\$19,117,032</u>	

FY 2011 Institution; Location	Amount	Title
Regents of U. of Minnesota; MN	380,923	Improving Soybean and Dry Bean Varieties and Rhizobia for Organic Systems
U. of New Hampshire; NH	2,863,915	Assisting Organic Dairy Producers to Meet the Demands of New and Emerging Milk Markets

FY 2011 Institution; Location	Amount	Title
USDA, ARS; TX	640,605	Use of Natural Strategies to Alleviate Enteric Pathogens in Organic Poultry
Pennsylvania State U.; PA	2,296,803	Finding the Right Mix: Multifunctional Cover Crop Cocktails for Organic Systems
USDA-ARS-MWA; CO	2,097,770	Carrot Improvement for Organic Agriculture with added Grower and Consumer Value
Oregon State U.; OR	475,835	Development of non-antibiotic programs for fire blight control in organic apple and pear
Regents of U. of California; CA	2,608,205	Collaborative Research and Extension Network for Sustainable Organic Production Systems in Coastal California
Auburn U.; AL	881,829	Development and Participatory Implementation of Integrated Organic Pest Management Strategies for Crucifer Vegetable Production in the South
Northeast Organic Farming Association of New York, Inc.; NY	49,663	Northeast Organic Farming Research Symposium
Washington State U.; WA	45,239	International Organic Fruit Symposium
Downstream Strategies, LLC; WV	50,000	Overcoming the Market Barriers to Organic Production in West Virginia
Tuskegee U.; AL	49,886	Organic Farming Planning Proposal for Research and Extension in Alabama
Michigan State U.; MI	45,695	Co-Creating Research and Extension Objectives for Organic Management of the Brown Marmorated Stink Bug
New Mexico State U.; NM	36,102	Planning for Enhanced Economic Sustainability of Organic Peanut Farming in the Southwest
Cornell U.; NY	2,356,999	Value-added grains for local and regional food systems
Washington State U.; WA	28,891	Conference for Dryland Organic Agriculture in the Pacific Northwest: Addressing Constraints to Production, Economics & Sustainability
Ohio State U.; OH	896,092	Whole farm approach incorporating pasture raised organic poultry and a novel cereal grain (Naked Oats) into an organic rotation
Oregon State U.; OR	46,580	Western Regional Functional Agricultural Biodiversity Planning Grant
Ohio State U.; OH	651,407	Mental Models and Participatory Research to Redesign Extension Programming for Organic Weed Management
Pennsylvania State U.; PA	670,847	Improving Weed and Insect Management in Organic Reduced-Tillage Cropping System
Oregon State U.; OR	626,728	Northern Organic Vegetable Improvement Cooperative
Michigan State U.; MI	427,961	Holistic Integration of Organic Strategies and High Tunnels for Midwest/Great Lakes Fruit Production
Arizona Board of Regents, U. of Arizona; AZ	884,074	Improving the safety and Quality of Organic Leafy Greens: Assessment of Good Production Practices along the Farm to Fork Continuum
Total	\$19,112,049	

FY 2012 Institution; Location	Amount	Title
Regents of U. of Minnesota; MN	1,924,693	Strategies to Improve Profitability of Organic Dairy Herds in the Upper Midwest
Rutgers - State U. of New Jersey; NJ	2,672,327	Whole-Farm Organic Management of BMSB and Endemic Pentatomids through Behaviorally-Based Habitat Manipulation
North Carolina State U.; NC	1,262,855	Creating an Organic Plant Breeding Center
Montana State U.; MT	1,499,815	Targeted grazing to reduce tillage: Environmental, ecological, and economic assessment of reintegrating animal and crop production
U. of Tennessee; TN	1,990,879	Alternative post-harvest washing solutions to enhance the microbial safety and quality of organic fresh produce
Washington State U.; WA	1,603,653	Developing adapted varieties and optimal management practices for quinoa in diverse environments
West Virginia U.; WV	1,850,360	Forage-based Parasite control in Sheep and Goats in the Northeast U.S.
Cornell U.; NY	1,962,562	Addressing Critical Pest Management Challenges in Organic Cucurbit Production
USDA, ARS; TX	586,235	Use of Natural Strategies to Alleviate Enteric Pathogens in Organic Poultry
Regents of U. of Minnesota; MN	1,069,999	Improving Soybean and Dry Bean varieties and Rhizobia for Organic Systems
Arizona Board of Regents, U. of Arizona; AZ	1,072,766	Improving the Safety and Quality of Organic Leafy Greens: Assessment of Good Production Practices Along the Farm to Fork Continuum
Oregon State U.; OR	539,344	Northern Vegetable Improvement Collaborative
Ohio State U.; OH	420,636	Mental Models and Participatory Research to Redesign Extension Programming for Organic Weed Management
Pennsylvania State U.; PA	659,220	Improving Weed and Insect Management in Organic Reduce-Tillage Cropping Systems
Total	19,115,344	

Specialty Crop Research Initiative FY 2009 Institution; Location	Amount	Title
Washington State U. Agricultural Research Center; WA	\$1,999,002	Biodegradable Mulches for Specialty Crops Produced Under Protective Covers
Washington State U.; WA	1,821,721	Agronomic and Biochemical Impacts of Biotic and Abiotic Stress on Pacific Northwest Flavor Crops
Washington State U.; WA	46,146	Development of a Smart Targeted Spray Application Technology Roadmap for Specialty Crops

Specialty Crop Research Initiative FY 2009		
<u>Institution; Location</u>	<u>Amount</u>	<u>Title</u>
Washington State U.; WA	474,115	Tree Fruit GDR: Translating Genomics into Advances in Horticulture
The Board of Trustees of the U. of Illinois; IL	1,951,981	Integrated Genomics and Management Systems for Control of Fire Blight
Cornell U.; NY	50,000	Establishing a Broccoli Industry in the Eastern United States
Cornell U.; NY	50,000	Planning to Expand the New Knowledge Fusion Model: Spurring Innovations for Specialty Crops
Cornell U.; NY	49,979	Addressing Research and Extension Needs of the Emerging Cold-Climate Wine Industry in the Northeast and Upper Midwest
Cornell U.; NY	47,297	Developing a Team to Address Major Viticultural, Enological & Market Driven Challenges to a Strong & Sustainable Eastern Wine Industry
U. of Georgia; GA	774,581	Advancing Onion Postharvest Handling Efficiency & Sustainability by Multimodal Quality Sensing, Disease Control, and Waste Stream Management
Michigan State U.; MI	1,831,469	RosBREED-Enabling marker-assisted breeding in Rosaceae
U. of Florida; FL	1,894,904	A multi-disciplinary approach to sustainability and profitability of US blueberry production using the tree-like species <i>Vaccinium arboreum</i>
U. of Florida; FL	23,126	Improving the profitability of blueberry production with a comprehensive precision agriculture program
U. of Arkansas, Fayetteville; AR	1,463,234	Management of Virus Complexes in Rubus
U. of Maine System Acting Through U. of Maine; ME	1,023,805	Systems Approach to Improving the Sustainability of Wild Blueberry Production
Washington State U.; WA	3,891,952	A Total Systems Approach to Developing a Sustainable Stem-Free Sweet Cherry Production, Processing, and Marketing System
Washington State U.; WA	49,479	Placing Fruit Canopy Management Automation Technology in the Field
U. of Maryland, College Park; MD	5,161,495	Precision Irrigation & Nutrient Mgmt. for Nursery, Greenhouse & Green Roof Systems: Wireless Sensor Networks for Feedback & Feedforward Cont
Clemson U.; SC	48,947	Bridging Specialty Crop Producers & Institutional Food Purchasers: Distilling a Research & Extension Agenda in Support of Local Food Systems
Colorado State U.; CO	49,949	Planning Grant to Document the Health-Promoting Properties of Dry Beans and to Increase Consumption in the US

Specialty Crop Research Initiative FY 2009		
<u>Institution; Location</u>	<u>Amount</u>	<u>Title</u>
Michigan State U.; MI	22,903	Limiting bird damage to fruit crops: A planning program to identify research directions for the future
U. of Florida; FL	1,967,863	Laurel Wilt of Avocado: Mitigation and Management of an Exotic, Insect-Vectored Disease
USDA, ARS; PA	559,531	Manipulating Host - and Mate-Finding Behavior of Plum Curculio: Development of a Multi-Life Stage Management Strategy for a Key Fruit Pest
USDA Agricultural Research Service; PA	637,330	"FasTrack" a revolutionary approach to long generation cycle specialty crop breeding
USDA, Agricultural Research Service; CO	1,826,298	Intelligent Spray Systems for Floral and Ornamental Nursery Crops
Rutgers, The State U. of New Jersey; NJ	1,503,166	Locally Grown Ethnic Greens & Herbs: Demand Assessment and Production Opportunities
The Regents of the U. of California; CA	3,965,999	Increasing Consumption of Specialty Crops by Enhancing their Quality and Safety
Texas AgriLife Research-Amarillo; TX	3,900,889	Management of Zebra Chip to Enhance Profitability and Sustainability of US Potato Production
The Regents of the U. of California; CA	1,957,835	An invasive mealybug pest and an emerging viral disease: a dangerous mix for West coast vineyards
Biological and Integrated Pest Management Research Unit; PA	2,381,759	Development of comprehensive strategies to manage Potato Virus Y in potato and eradicate the tuber necrotic variants
Mississippi State U.; MI	422,964	Development of a Grape Community of Practice for the eXtension System
Oregon State U.; OR	1,392,933	Expansion of hazelnut production, feedstock, and biofuel potential through breeding for disease resistance and climatic adaptation
The Ohio State U.; OH	49,966	Identifying stakeholder needs for establishing urban specialty crops enterprise
Louisiana State University Agricultural Center; LA	518,749	Development of an eXtension Community of Practice (CoP) - All about Blueberries
Louisiana State University Agricultural Center; LA	2,841,987	Participatory Modeling and Decision Support for Improving Sweetpotato Production Efficiency, Quality and Food Safety
Total	<u>\$46,653,354</u>	

FY 2010 Institution; Location	Amount	Title
Cornell U.; NY	\$50,000	Development & Implementation of a National Web-Based Decision Support System for Apple IPM
Virginia Polytechnic Institute and State U.; VA	2,729,649	Integrated management of zoosporic pathogens and irrigation water quality for a sustainable green industry
USDA-ARS; CA	1,483,438	A diagnostic toolbox for integrated management of apple postharvest necrotic disorders
Cornell U.; NY	3,172,100	Developing an Eastern Broccoli Industry
Oklahoma State U.; OK	30,000	Defining Research and Extension Priorities for Pecan Production, Processing, Marketing and Consumer Utilization
Regents of the U. of California; CA	1,549,473	Recurrent Migrations of Verticillium dahlia: A Stealthy and Pervasive threat to California and US Specialty Crops
USDA-ARS Geneva; PA	49,316	Enhancing the Potential of Innovative Rootstock Technologies to Increase Profitability and Sustainability in U.S. Tree Fruit Production
USDA-Agricultural Research Service; CA	562,035	Developing sustainable vineyard water management strategies for limited and impaired water supplies
The Pennsylvania State U.; PA	1,338,438	Determining the Roles and Limiting Factors Facing Native Pollinators in Assuring Quality Apple Production in Pennsylvania
U. of Florida; FL	2,939,056	Precision disease Management for sustainable strawberry production in the eastern U.S.
The Pennsylvania State U.; PA	50,000	Protective Structures for Berry Crop Production: Assessing Grower Needs and Market Potential
Michigan State U.; MI	46,050	Conserving Native Bees and Valuing their Services for Sustainable Specialty Crop Pollination
Purdue U.; IN	2,441,298	Developing LED Lighting Technology and Practices for Sustainable Specialty-Crop production
Texas AgriLife Research; TX	3,802,678	Plant Genetics and Genomics to Improve Drought and Salinity Tolerance for Sustainable Turfgrass Production in the Southern United States
Agricultural Research Service - USDA; MD	1,697,509	Innovative Technologies and Process Optimization for Food Safety Risk Reduction Associated with Fresh and Fresh-cut Leafy Green Vegetables
U. of Minnesota; MN	496,663	Development of an eXtension Community of Practice (CoP) - Rootstocks and Apple Varieties for the Eastern States (RAVES)
AZ Board of Regents on behalf of Arizona State U.; AZ	312,471	Asian Citrus Psyllid in California: an Economic Analysis of Efficient Management and Control Strategies

FY 2010 Institution; Location	Amount	Title
Virginia Polytechnic Institute and State U.; VA	3,796,693	Improved grape and wine quality in a challenging environment: An eastern US model for sustainability and economic vitality
U. of Illinois; IL	1,548,793	Impact and social acceptance of selected sustainable practices in ornamental crop production systems
Colorado State U.; CO	2,467,589	ipmPIPE and Innovative Disease Diagnostic tools for Onion Growers
The U. of Tennessee; TN	50,000	Developing a Commercial Edamame Industry in the Eastern US
Oregon State U.; OR	5,758,980	Biology and Management of Spotted Wing Drosophila on Small and Stone Fruits
Auburn U.; AL	604,771	A SMART Trap System for the Invasive Ambrosia Beetles in Production Nurseries
U. of California, Davis; CA	2,590,885	Precision Canopy and Water Management of Specialty Crops through Sensor-Based Decision Making
Regents of the U. of California; CA	2,518,477	Next-Generation Lettuce Breeding: Genes to Growers
Oregon State U.; OR	50,000	Feasibility study of automated full-chain traceability systems to improve food safety, quality and productivity of specialty crops
The Ohio State U.; OH	2,037,717	A Systems Approach to Managing Microbial Threats to Greenhouse Tomatoes
Northern Marianas College; MP	28,629	Artificial food storage cavern for improving the storability of taro and sweet potato produced in the Northern Mariana Islands
Michigan State U.; MI	1,945,978	RosBREED-Enabling marker-assisted breeding in Rosaceae
Washington State U.; WA	519,741	Tree Fruit GDR: Translating Genomics into Advances in Horticulture
Total	\$46,668,427	

FY 2011 Institution; Location	Amount	Title
Iowa State U. of Science and Technology; IA	1,949,642	Bioplastic Container Cropping Systems: Green Technology for the Green Industry
Cornell U.; NY	2,091,357	Accelerating Grape Cultivar Improvement via Phenotyping Centers and Next Generation Markers
Auburn U.; AL	1,542,160	Magnetoelastic Biosensors for Detection of Pathogens on Globe Fruits
Clemson U.; SC	50,000	Containment, Remediation, and Recycling of Irrigation Water for Sustainable Ornamental Crop Production
U. of Massachusetts Amherst; MA	3,318,651	Pollination Security for Fruit and Vegetable Crops in the Northeast
ARS, Midwest Area; CO	1,332,040	Translational Genomics in Cucumber: Tool Development and Application for Recessive Disease Resistances

FY 2011 Institution; Location	Amount	Title
North Carolina State U.; NC	2,490,839	Developing of Grafting Technology to Improve Sustainability and Competitiveness of the U.S. Fruiting Vegetable Industry
Washington State U.; WA	49,506	Roadmap Development for U.S. Raspberry Producers: Forging Links between New Tools for Breeding Programs and Crop Markets
Saint Joseph's U.; PA	322,202	Marketing Vitamin D Mushrooms: A Case Study of Nutrition Marketing for Specialty Crops
USDA-Agricultural Research Service; CA	1,590,717	Developing the Genomic Infrastructure for Breeding improved Black Raspberries
Cornell U.; NY	2,511,333	Northern Grapes: Integrating viticulture, winemaking, and marketing of new cold-hardy cultivars supporting new and growing rural wineries
USDA, ARS; PA	5,739,966	Biology, Ecology, and Management of Brown Marmorated Sink Bug in Orchard Crops, Small Fruit, Grapes, Vegetables, and Ornamentals
North South Institute, Inc.; FL	284,106	Ethnic & Specialty Crops Research and Development: Local Food Networks & Heritage Marketing in Florida and Alabama
U. of Georgia Research Foundation, Inc.; GA	1,219,636	Systems approach at Improving the Long-Term competitiveness of U.S. Pecans based on their Nutritional and Health-Promoting Components
Michigan State U.; MI	2,044,335	Limiting bird damage in fruit crops: Integrating Economic, Biological, and Consumer Information to Develop Sustainable, Long-Term Solutions
Rutgers; State U. of New Jersey; NJ	1,866,558	Strategies for improving the United States responses to Fusarium, Downy Mildew and Chilling Injury to Production of Sweet Basil
U. of Maryland; MD	1,861,387	Developing Scientifically-based consensus Food Safety Metrics for Leafy Greens and Tomatoes
U. of California, Davis; CA	50,000	Sustainable Management of Canker Diseases to extend the Productive Life of Vines, Stone Fruits, and Nut Crops
Ohio State U.; OH	50,000	Reducing injury to fruit and vegetable crops caused by drift or volatility of herbicides applied to grow crops
Regents of U. of Minnesota; MN	903,909	Developing Native and Native-European Hybrid Hazelnut Germplasm and Agronomics for the Upper Midwest
Michigan State U.; MI	2,472,895	Development and Delivery of Resource-Efficient Ecologically Sustainable Fruit Production Systems for Apple and Cherry Producers
Board of Regents of U. of Wisconsin; WI	3,773,367	Improved breeding and variety evaluation methods to reduce acrylamide content and increase quality in processed potato products
Michigan State U.; MI	1,256,039	Genomics-Based approaches for improving Petunia Production Efficiency and Performance

FY 2011 Institution; Location	Amount	Title
Virginia State U.; VA	49,280	Reinforcing skills and building infrastructure for production, handling, processing, and distribution of vegetable soybean (edamame)
U. of Florida; FL	2,202,711	Disease-Resistant Seedless Muscadine Grape Cultivars Utilizing Eco-and Consumer Friendly Cisgenic Modification Technologies
USDA,ARS; CA	624,502	Developing Sustainable Vineyard Water Management Strategies for Limited and Impaired Water Supplies
Michigan State U.; MI	1,908,981	RosBREED-Enabling marker assisted breeding in Rosaceae
Regents of U. of California; CA	1,903,727	Increasing Consumption of Specialty Crops by Enhancing their Quality and Safety
Washington State U.; WA	1,005,292	Tree Fruit GDR: Translating Genomics into Advances in Horticulture
Total	46,465,138	

FY 2012 Institution; Location	Amount	Title
USDA, ARS; CA	1,761,897	New Detection, Research, and Extension Tools for managing Wood-Canker Diseases of Fruit and Nut Crops
Pennsylvania State U.; PA	1,442,481	Addressing Management Gaps with Sustainable Disease and Pest Tactics for Mushroom Production
USDA, ARS; CA	1,142,930	Development of Disease-Resistant Walnut Rootstocks: Integration of Conventional and Genomic Approaches
U. of Arkansas, Fayetteville; AR	827,745	Managing Downy Mildew of Spinach: Genomics-Based Approach to the Host and the Pathogen
USDA, ARS; GA	1,335,515	Understanding the Global Virus Distribution in Tomato and Development of Translation Genomic Tools to Accelerate Breeding for Resistance
Washington State U.; WA	34,046	Snap Pea: Enhanced production of Nutrient-Dense Vegetable Legumes
Citrus Research & Development Foundation; FL	9,000,000	Rear and Release Psyllids as Biological Control Agents - An Economical and Feasible Mid-Term Solution for Huanglongbing (HLB) Disease
Iowa State U. of Science and Technology; IA	1,582,002	Shielding Cucurbit Crops for Resilient Agroecosystems
Michigan State U.; MI	1,697,671	Developing Sustainable Pollination Strategies for U.S. Specialty Crops
Purdue U.; IN	3,027,747	Automation of Dormant Pruning of Specialty Crops
U. of Delaware; DE	1,573,112	Toward a Better Bean: Improving Genetic, Genomic, Breeding, and Crop Management Resources for Lima Bean to benefit the Mid-Atlantic Region
North Carolina State U.; NC	1,298,023	Development and Use of Genomic Tools to Improve Firs for use as Christmas Trees

FY 2012 Institution; Location	Amount	Title
Board of Regents of U. of Wisconsin; WI	2,144,836	Building Market Foundations for Sustainable Vegetable Production and Processing: Consumer and Metrics-Based Approach
Regents of U. of Minnesota; MN	2,136,489	Germplasm Improvement of Low-Input Fine Fescues in Response to Consumer Attitudes and Behaviors
USDA,ARS; CA	1,376,494	Developing Sustainable Vineyard Water Management Strategies for Limited and Impaired Water Supplies
Michigan State U.; MI	1,512,458	RosBREED-Enabling Marker-Assisted Breeding in Rosaceae
Cornell U.; NY	2,471,807	Accelerating Grape Cultivar Improvement via Phenotyping Centers and Next Generation Markers
Texas AgriLife Research; TX	2,822,422	Management of Zebra Chip to Enhance Profitability and Sustainability of U.S. Potato Production
North South Institute, Inc.; FL	465,453	Ethnic & Specialty Crops Research and Development: Local Food Networks & Heritage Marketing in Florida and Alabama
U. of Maryland; MD	3,696,865	Developing Scientifically-Based Consensus Food Safety Metrics for Leafy Greens and Tomatoes
Washington State U.; WA	1,254,645	Agronomic and Biochemical Impacts of Biotic and Abiotic Stress on Pacific Northwest Flavor Crops
Board of Regents of U. of Wisconsin System; WI	3,834,549	Improved Breeding and Variety Evaluation Methods to Reduce Acrylamide Content and Increase Quality in Processed Potato Products
Total	<u>\$46,439,187</u>	

Specialty Crop Research Initiative

Mr. Aderholt: Please update the chart provided in the fiscal year 2014 hearing record of the Specialty Crop Research Initiative, including the amount, recipient(s) and location of recipient(s), for fiscal year 2013.

Response: This is a competitive program. Funding was not provided for Specialty Crop Research Initiative in 2013 under the Farm Bill extension. The information is submitted for the record.

[The information follows:]

Specialty Crop Research Initiative
FY 2009

Location of Recipient(s)	Recipients	Amount
AR	University of Arkansas, Fayetteville	\$1,463,234
CA	University of California	5,923,834
CO	Colorado State University	49,949
FL	University of Florida	3,885,893
GA	University of Georgia	774,581
IL	University of Illinois	1,951,981
LA	Louisiana State University	3,360,736
MD	University of Maryland, College Park	5,161,495
ME	University of Maine	1,023,805
MI	Michigan State University	1,854,372
NJ	Rutgers, The State University of New Jersey	1,503,166
NY	Cornell University	197,276
NY	Agricultural Research Service, USDA	2,381,759
OH	Agricultural Research Service, USDA	1,826,298
OH	Ohio State University	49,966
OK	Oklahoma State University	422,964
OR	Oregon State University	1,392,933
SC	Clemson University	48,947
TX	Texas A&M University	3,900,889
WA	Washington State University	8,282,415
WV	Agriculture Research Service, USDA	1,196,861
	Federal Administration	2,000,000
	Small Business Innovation Research	1,200,000
	Peer Panel	146,646
Total		\$50,000,000

Specialty Crop Research Initiative
FY 2010

Location of Recipient(s)	Recipients	Amount
AL	Auburn University	\$604,771
AZ	Arizona State University	312,471
CA	University of California	6,658,835
CA	Agricultural Research Service, USDA-	562,035
CO	Colorado State University	2,467,589
FL	University of Florida	2,939,056
IL	University of Illinois	1,548,793
IN	Purdue University	2,441,298
MD	Agricultural Research Service, USDA	1,697,509
MI	Michigan State University	1,992,028
MN	University of Minnesota	496,663
N. Marianas	Northern Marianas College	28,629
NY	Cornell University	3,222,100
NY	Agricultural Research Service, USDA	49,316
OH	Ohio State University	2,037,717
OK	Oklahoma State University	30,000
OR	Oregon State University	5,808,980
PA	Pennsylvania State University	1,388,438
TN	University of Tennessee	50,000
TX	Texas A&M University	3,802,678
VA	Virginia Polytechnic Institute & State University	6,526,342
WA	Agriculture Research Service, USDA	1,483,438
WA	Washington State University	519,741
	Federal Administration	2,000,000
	Small Business Innovation Research	1,200,000
	Peer Panel	131,573
Total		\$50,000,000

Specialty Crop Research Initiative
FY 2011

Location of Recipient(s)	Recipients	Amount
AL	Auburn University	\$1,542,160
CA	The Regents of the University of California	1,903,727
FL	North South Institute, Inc.	284,106
FL	University of Florida	2,202,711
GA	The University of Georgia Research Foundation, Inc.	1,219,636
IA	Iowa State University of Science and Technology	1,949,642
IL	Agricultural Research Service, Midwest Area	1,332,040
MA	University of Massachusetts Amherst	3,318,651
MI	Michigan State University	7,682,250
MN	Regents of the University of Minnesota	903,909
MD	Agricultural Research Service, USDA	8,005,185
MD	University of Maryland	1,861,387
NC	North Carolina State University	2,490,839
NJ	Rutgers; The State University of New Jersey	1,866,558
NY	Cornell University	4,602,690
OH	The Ohio State University	50,000
PA	Saint Joseph's University	322,202
SC	Clemson University	50,000
VA	Virginia State University	49,280
WA	Washington State University	1,054,798
WI	The Board of Regents of the University of Wisconsin System	3,773,367
	Federal Administration	2,000,000
	Small Business Innovation Research	1,200,000
	Biotech Risk Assessment	203,440
	Peer Panel	131,422
Total		\$50,000,000

Specialty Crop Research Initiative
FY 2012

Location of Recipient(s)	Recipients	Amount
AR	University of Arkansas, Fayetteville	\$827,745
CA	USDA- Agricultural Research Service	4,281,321
DE	University of Delaware	1,573,112
FL	Citrus Research & Development Foundation	9,000,000
FL	North South Institute, Inc.	465,453
GA	USDA-Agricultural Research Service	1,335,515
IA	Iowa State University of Science and Technology	1,582,002
IN	Purdue University	3,027,747
MI	Michigan State University	3,210,129
MN	Regents of the University of Minnesota	2,136,489
MD	University of Maryland	3,696,865
NC	North Carolina State University	1,298,023
NY	Cornell University	2,471,807
PA	The Pennsylvania State University	1,442,481
TX	Texas AgriLife Research	2,822,422
WA	Washington State University	1,288,691
WI	The Board of Regents of the University of Wisconsin System	5,979,385
	Federal Administration	2,000,000
	Small Business Innovation Research	1,248,000
	Biotech Risk Assessment	203,580
	Peer Panel	109,233
Total		\$50,000,000

Rural Development Centers

Mr. Aderholt: Please update the chart provided in the fiscal year 2014 hearing record of funding provided to the rural development centers through NIFA's integrated program for fiscal years 2009 through 2013. Include a summary of how the funding was used.

Response: The information is submitted for the record.

[The information follows:]

Regional Rural Development Centers					
FY	Northeast Region	Southern Region	North Central Region	Western Region	Total
2009	\$312,256	\$312,256	\$312,256	\$312,256	\$1,249,024
2010	\$312,256	\$312,256	\$312,256	\$312,256	\$1,249,024
2011	\$237,524	\$237,524	\$237,524	\$237,524	\$950,096
2012	\$237,444	\$237,445	\$237,444	\$237,444	\$949,777
2013	\$218,996	\$218,996	\$218,996	\$218,995	\$875,983

There was \$218,996 awarded to each of the four regional rural development centers in FY 2013. In FY 2013, the Rural Development Centers worked with land grant institutions to build capacity within their regions to conduct and support effective rural development activities. The Centers supported university-based faculty who conduct research that addresses critical and emerging rural development issues and who use their knowledge and resources in outreach to help rural communities and citizens. The Centers coordinated the integrated research, education, and extension efforts among states and linked the resources of land-grant universities with local decision-makers, rural residents, and diverse partners to address a wide range of national and regional rural development issues. Funding was used to support these activities, which included several staff positions, travel, and direct costs such as materials and supplies, publications, promotion materials, equipment use fees, consultative services, and conference sponsorship. Two centers also provided mini-grants and competitive sub-awards to land-grant institutions within their region.

Center funds continue to support efforts in entrepreneurship, e-commerce, the changing interface between rural, suburban, and urban places, and workforce quality and jobs creation. In FY 2013, the Centers leveraged their federal funding through an Interagency Agreement between the USDA and HHS Substance and Abuse Mental Health Services Administration (SAMHSA). With the \$2,727,272 in SAMHSA funding, the Centers are spearheading a national project to identify and share best practices for benchmarking community behavioral health.

In 2012, the North Central Regional Center documented impacts of \$183 million in grants and resources leveraged/generated by communities and 18,327 jobs created or retained as a result of Extension Community Development Program investments in the 12-state region. Extrapolating to four Regional Centers, NIFA estimates that the collaboration enabled by the Rural Development Center awards to promote and assist community development Extension produced \$732 million in impacts and 73,308 jobs created or saved nationwide in 2012.

Small Business Innovation Research

Mr. Aderholt: Please update the chart provided in the fiscal year 2014 hearing record of all projects funded through Small Business Innovation Research program for fiscal years 2009 through 2013.

Response: Below is a list of SBIR Phase I and Phase II projects funded for fiscal years 2009 through 2013. The information is provided for the record.

[The information follows:]

2009

Phase I: 70 Projects Funded for a Total of \$5,531,266

<u>Company Name</u>	<u>Award Amount</u>	<u>Project Title</u>
Summerdale, Inc.	\$64,250	Organic Acid Formulations for Wood Protection: Inhibition of Mold Fungi
Assured Biotechnology Corporation	\$80,000	Real-time Prediction of Formaldehyde (H ₂ CO) Emissions during Wood-Based Panels Manufacturing
GeoVantage, Incorporated	\$80,000	Advanced Remote Sensing Methods for Cogongrass Mapping
BioPulping International, Inc.	\$80,000	A Novel Sulfite Pretreatment Process (SPORL) for Efficient Biochemical Conversion Woody Biomass to Bioethanol
Abraxis LLC	\$80,000	Development of a Fast Screen (On-site) Analytical Assay for Pyridine Herbicides in Animal Waste and Compost
Giner, Inc.	\$79,956	Electrochemical Ammonia Monitor for Agricultural Operations
TDA Research, Inc.	\$80,000	Desulfurization of Biogas Derived from Animal Manure
Photonic Biosystems, Inc. dba Pacific Technologies	\$79,823	Ammonia Sensor for CAFO Monitoring.
Biological and Environmental Systems and Technologies (BEST)	\$80,000	Ammonia Removal and Recovery System Integrated with Anaerobic Digestion for Mitigating Air and Water Quality Impacts of Animal Operations
Green Heron Tools, LLC	\$80,000	Need for and feasibility of designing, producing and marketing agricultural tools & equipment for women
Wind Innovations LLC	\$80,000	Cost-Effective Wind Turbine for Electricity Self Sufficiency on Small and Mid-Size Farms
Eldertide LLC	\$80,000	Developing Elderberries as a Specialty Crop for Herbal Supplements, Nutraceuticals and Functional Foods

This Old Farm	\$78,705	Value-Added Multi-Purpose Processing Establishment using Renewable Energy Sources as a Centerpiece to a Sustainable Educational Farm
OCR, Inc.	\$79,998	Agaricus mushroom production utilizing local substrate materials
Mountain Meadow Wool Company, Inc.	\$80,000	On-site Effluent Treatment of Wastewater from Wool Processing Facilities
Technical Designs Inc.	\$77,986	A Biodegradable Thin-Film Mulching System for Weed Suppression in Commercial Crop Production
Physical Sciences Inc.	\$79,998	Solar Optical Waveguide System for Value Added Transplant Production
Phenotype Screening Corporation	\$80,000	Next Generation Root-Pest Resistance Research and Screening Tool
SynTouch LLC	\$65,691	Robotic Fruit Harvester Sensors
GrassRoots Biotechnology, Inc.	\$80,000	Improving Root Architecture in Energy Crops
Eltron Research & Development Inc.	\$80,000	Catalytic Ethylene Removal
Cycloptics Technologies, LLC	\$80,000	Highly Efficient Luminaires for Supplemental Greenhouse Lighting
Datastar, Inc.	\$79,539	Remote Sensing for Early Detection and Mitigation Of Plant Stress and Disease in Florida Citrus
AgPollen LLC	\$78,600	Development of Nest Attractant for the Blue Orchard Bee
Summerdale, Inc.	\$63,788	Synergistic, Natural Compounds as Insecticides
Infinite Eversole-Specialty Crop Services	\$80,000	A Prototype Program for Attaining Specialty Crop Non-Regulated Status
InsectiGen, Inc.	\$80,000	Development of BtBooster Synergist for Beetle-Active Bt
AC Diagnostics, Inc.	\$79,930	A Sensitive Immunocapture Real-Time One-Step RT-PCR for Early Detection of Plant Pathogens in Crops
Alpha Scents, Inc.	\$80,000	Attract and Kill Technology to Control Citrus Leafminer in Citrus Nurseries and Orchards
Agion Technologies Incorporated	\$79,462	Synergistic Agents to Reduce Fungicide Resistance and Health Risks

Eckstein Diagnostics, Inc.	\$80,000	Lipid-based ELISA test for detection of dairy cattle with Johne's disease
Integrated Nano-Technologies	\$79,998	Rapid, In-Field Method for Genomic-Based Identification
Z4 Energy Systems, LLC	\$80,000	Solar Heater to Prevent Stock Tank Freezing
Strategic Solutions International, LLC	\$79,956	Improved Animal Traceability
Eco-Sol, LLC	\$80,000	Improved Feed Products From Pima Cottonseed: By-products of Biofuels Feedstock Production
Wilks Enterprise, Inc.	\$80,000	Portable Mid Infrared Analyzer for Onsite Measurement of Nitrate and Organic Matter in Soil
Technova Corporation	\$79,929	Development of an Inexpensive, Rapid and Highly Sensitive Perchlorate Nanobiosensor
Hydrolinear Irrigators Incorporated	\$75,810	Efficient Mobile Power Supply & Energy Reclamation for Linear-move and Center-pivot Irrigation Systems
Vortant Technologies, LLC	\$79,933	Self Contained Sensor and Telemetry for Remote Water Quality Monitoring
Applied Geosolutions, LLC	\$80,000	Developing operational capability of AWiFS for tillage monitoring
Blue Moon Bulbs, LLP DBA Westscape Nursery	\$79,938	Use of the halophyte <i>Sarcocornia utahensis</i> as a phytoremediation strategy for the amelioration of saline-sodic impacted soils
Separation Systems Technology, Inc.	\$80,000	Liquid concentration by direct osmosis
TessArae, LLC	\$79,679	Multiple Foodborne Pathogen Resequencing Microarray-based Diagnostic Assay
Edenspace Systems Corporation	\$80,000	Production of a Value-Added Crop for Greater Human Nutrition
Industry Vision Automation Corporation	\$79,984	Hyperspectral Fluorescence Imaging Detection System for Black Walnut Shell Fragments Recognition and Removal
Compact Membrane Systems, Inc.	\$80,000	Solvent recovery from vegetable oil miscella by Novelsolvent-resistant nanofiltration membranes
Twilight Training LLC dba ViaSim	\$79,760	Research and Development of a Simulation-Based Strategic Planning Tool for Water and Wastewater Resource Management
Webfish Pacific	\$79,997	Childhood Oral Health Initiative for Rural Families

Clean Plus, Inc.	\$79,812	Corn Stover Sorbent Granules
Sonsight Inc.	\$80,000	Scalable Low-Windspeed Generator
Crile Carvey Consulting, Inc.	\$79,690	Rural wireless network tower site location and optimization using web-based constrained optimization techniques
Custom Data, Inc.	\$79,849	Delivering Medication Therapy Management Services through Telepharmacy to Serve Remote Rural Communities.
Sertech Heating and Air Conditioning, Inc	\$77,173	Solar Thermal Energy Storage Vessel
Sea & Reef Aquaculture, LLC	\$79,997	Development of culture methods for marine ornamental fish larvae
Virginia Cobia Farms, LLC	\$79,933	Cobia Production Using Novel Low Salinity RAS Technology
Muti-Duti Manufacturing Inc (MDM)	\$77,603	High-Efficiency Axial Flow Pump Development for Use in Recirculating Aquaculture Systems
Hybrid Catfish Company	\$80,000	Channel Catfish Pituitary for use as a Spawning Aid in Aquaculture
NanoDynamics Life Sciences, Inc.	\$79,969	Slow Release Non-Toxic Antifouling Additives for Coatings Used in Aquaculture
Baxter Land Company, Inc.	\$75,000	Commercial-Scale Implementation of Blue-Catfish Germplasm for Hybrid Production
Ecovative Design LLC	\$80,000	New indust. crop yielding a biomaterial that will reduce dependence on foreign oil and increase the econ. sustainability of farms in America
Applied Colloids	\$79,745	Renewable Biofuel Based on Jojoba Oil
Evolutionary Genomics, Inc.	\$79,998	Genes that impact sorghum grain, sugar, and biomass yield.
Mayaterials, Inc	\$80,000	Conversion of Agricultural Waste into High Quality Insulation for Energy Conservation
Allopartis Biotechnologies	\$80,000	Improving enzymes for saccharification of sustainable cellulosic biomass for biofuel production
Ecoversion LLC	\$80,000	Sorghum Protein Adhesives from Low Cost DDGS
Algaen Corporation	\$79,888	Developing Innovative Photobioreactor and Extraction Technology For Production of Biodiesel Feedstock Using Microalgae

Suganit Systems Inc	\$79,982	Development of co-immobilized enzyme pellets to replace GMOs for cellulosic ethanol
Compact Membrane Systems, Inc.	\$80,000	Venting of Underground Storage Tanks Containing Ethanol-Gasoline Blends
Cronus, LLC	\$79,917	Formulation of Biodegradable Nursery Pots from Poultry Feather Keratin
Seaberry Farm, LLC	\$80,000	Sustainable Production Practices in Woody Cut Flower Markets

2009

Phase II: 32 Projects Funded for a Total of \$10,911,913

<u>Company Name</u>	<u>Award Amount</u>	<u>Project Title</u>
Forest Concepts, LLC	\$350,000	Beneficiation of Chipped and Shredded Woody Biomass
Rynel, Inc	\$350,000	Development and Commercialization of a Biodegradable Stabilized Growing Media
Applied Biomathematics	\$349,984	Forest pest risk analysis in dynamic landscapes
GreenWood Resources, Inc.	\$348,170	Developing a Molecular-Assisted Hybridization Strategy for the Improvement of the Quality of Poplar Biomass for The United States' Bio-Fuels
SSS Optical Technologies, LLC	\$349,793	Sensor of ammonia emission from animal manure
Rainbow Organic Farms Co.	\$302,470	A CSA Model to bring Locally Grown Foods to the Corporate Workplace, Inner City Households and Schools Utilizing a Supermarket Infrastructure
ISCA Technologies, Inc.	\$350,000	Novel environmentally friendly control of the citrus leafminer, the proliferator of citrus canker, with sex pheromone.
Bee Alert Technology, Inc	\$350,000	Sonographic Analysis for Rapid Detection of Varroa Mites and Other Pathologies without opening the Beehive
Trellis Growing Systems LLC	\$349,593	Modular Trellis System for Brambles
Advanced Biological Marketing	\$349,621	Improved Agricultural Sustainability through Microbially Enhanced Nitrogen Fertilizer Use Efficiency and Yield
Divergence, Inc.	\$350,000	Control of Root Knot Nematode by Transgenic RNA Interference
RT Solutions, LLC	\$350,000	Commercial Plant Production and Protection Products from Vermicomposted Dairy Manure

ISCA Technologies, Inc.	\$350,000	SPLAT PBW: Long Lasting Sprayable Pheromone Formulation to Eradicate Pectinophora Gossypiella
Long Branch Company, Inc.	\$132,448	Automated Vaccination of Broiler Chicken Flocks
Harrisvaccines, Inc.	\$346,765	Demonstrate the Safety and Efficacy of Vaccine Candidate
3C Cattle Feeders Inc.	\$349,422	Improving the efficiency of feed use in the cattle industry
Agri Processing Services LLC	\$348,834	Diversion From Land Disposal Of Nutrients Recovered From Non-MPP Processing Plant Wastewater To Value-Added Use In Multi-Spec. Feed Rations
JDC, Inc.	\$350,000	Improved Hard Process; Breakthrough Kiln Process for Manufacturing Phosphoric Acid
CommGraphics Interactive, Inc.	\$349,321	Children's Nutrition and Exercise, Healthy Lifestyles Video Game
MEI Research, Ltd	\$345,276	Free-living Energy Balance Assessment and Management in Close to Real Time
Guild Associates, Inc.	\$349,052	Phage mediated detection of Bacillus anthracis on deliberately contaminated fresh foods
Sensor Development Corp	\$349,915	A New Nano Based Real-Time Aflatoxin Detector Phase II
Bioo Scientific	\$349,695	Rapid enzyme based detection of toxins in food.
Sonsight Inc.	\$349,981	Low Windspeed Wind Turbine
Scientific Fishery Systems, Inc.	\$349,959	Phase II: Rural Coastal Alaska Fish Waste Conversion
Aquatic Innovations, LLC	\$342,620	Sustainable Production of Pinfish for the Gulf of Mexico Live Bait Market
Information & Simulation Systems	\$349,563	A Management Tool and Strategy for Agriculture Development in Offshore United States Coastal Waters
Exelus, Inc.	\$350,000	Exelus Biomass-to-Gasoline Process
Metabolix, Inc	\$349,450	Blow Molded Bioproducts From Renewable Plastics
SarTec Corporation	\$350,000	Ultrafast continuous biodiesel production from multiple feedstocks using fixed bed reactors and metal oxide catalysts (The Megyan? process)
Kuehnle AgroSystems, Inc.	\$349,981	Microalgae As Renewable Biofactories: The Production of Biofuels and High Value Bioproducts

Summit Seed, Inc.	\$350,000	Utilize corn derived products driven from ethanol production for horticultural weed control, a natural fertilizer with enhanced plant growth
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2010**Phase I: 92 Projects Funded for a Total of \$8,006,218**

<u>Company Name</u>	<u>Award Amount</u>	<u>Project Title</u>
HM3 Energy, Inc.	\$89,799	Forest waste contaminant removal for conversion into clean fuel for coal-fired power plants
GreenWood Resources, Inc.	\$83,441	Alder Genetic Improvement for the Pacific Northwest Forest Products Industry
Azavea Inc	\$90,000	OpenTreeMap: Tools for Collaborative Urban Forestry
TDA Research, Inc.	\$90,000	Low-cost Removal of Dissolved Solids and Fermentation Inhibitors for Cellulosic Ethanol
Edenspace Systems Corporation	\$90,000	Modifying Lignin Structure in Poplar for Enhanced Biomass Conversion
Sound Watershed Consulting	\$89,912	Explicit Riparian Design
Applied Biotechnology Institute	\$89,939	Synergy of Plant-Produced Enzymes to Convert Forest Products into Biofuels
Organix, Inc.	\$82,000	Anaerobically Digested Manure Fiber for Environmental Cleanup and Remediation
Biogas & Electric LLC	\$87,820	Novel approach to NOx reduction in biogas exhaust from anaerobic digestion facilities at dairy farms.
Environmental Energy & Engineering Co.	\$90,000	Ammonia Recovery and Biomethane Production from Concentrated Manure
Algaen Corporation	\$79,966	Bioremediation of Animal Wastewater Using Oil-Rich Microalgae
ECO Composites LLC	\$79,205	Manufacture of Compostable Plant Containers Utilizing Anaerobic Digester Fibers in Standard Molding Processes
Multiform Harvest Inc.	\$89,378	Upgrading Struvite Recovered from Dairy Waste into Marketable Fertilizer and Feed Products
Sea Star International, LLC	\$90,000	An Ozark Regional Pilot Program to Manufacture Economical, Value-Added Products Qualifying for USDA Certified Organic Status.
Pacific Biodiesel, Inc.	\$90,000	Aina Mo Soil Amendment Project

Ronald P. Weidenbach dba Hawaii Fish Company	\$90,000	Renewable Energy Aquaculture Aeration For Small and Mid-Sized Farms
ISCA Technologies, Inc.	\$90,000	A guava-volatile-based repellent formulation to manage the Asian citrus psyllid, the key vector of Citrus Greening
Quantalux, LLC	\$89,999	Thermal Storage for Small Farms
Alpha Scents, Inc.	\$89,687	Optimizing an inexpensive trap and lure for monitoring and management of green june beetle
Top 10 Produce LLC	\$90,000	GS-1 barcoding and traceability services for small family farms and organization of regional grower- owned cooperatives.
Pharaoh Industries	\$90,000	Developing Innovative Marketing Strategies and Distribution Networks for Hope Goods
Native Seedsters, Inc.	\$90,000	Feasibility Test of Seedster Technology to Improve Quantity and Quality of Carrot and Yarrow Seed
Sensor Electronic Technology	\$89,958	Semiconductor Ultraviolet Irradiation Devices for Greenhouse Crops
Orbital Technologies Corporation	\$90,000	LEDs for managing pest insects in greenhouses
Wildwood Gin, Inc	\$90,000	Evaluation of UltraClean Cotton for Nonwovens Application
Rivertop Renewables, Inc.	\$90,000	New Controlled Release Fertilizer Systems Derived from Biomass
Jersey Flora, Inc	\$90,000	Energy efficient systems for high frequency propagation of virus-free Lilium cvs
Capstan Ag Systems, Inc.	\$90,000	Development of an integrated actuator for real time control of spray nozzle flow rate and droplet size spectrum
ISCA Technologies, Inc.	\$90,000	Accurate Huanglongbing (HLB) Diagnosis
Western Laboratories Inc.	\$73,598	Enhanced-throughput Quantification of Rhizoctonia and Pythium DNA in soil samples
Agricultural Research Initiatives, Inc.	\$90,000	Development of a Mycoherbicide for Control of Dandelion
Insectigen, Inc.	\$90,000	Development of a BtBooster Synergist for Bt Transgenic Plants
ISCA Technologies, Inc.	\$90,000	SPLAT BASE: A Revolutionary Attract And Kill Technology To Effectively Manage Orchard Pests

Alpha Scents, Inc.	\$84,044	Simplified synthetic pathway of citrus leafminer pheromone
Bee Power, L.P.	\$90,000	Selection and Genomic Characterization of Honey Bees Resistant to Viral Pathogens
BioStrategies-LC	\$90,000	Plant Produced Porcine IL-12 Vaccine Adjuvant for Swine Flu and Other Viral Diseases
Rxo Biosciences LLC	\$90,000	Rapid, Simple and Inexpensive Detection of Potyvirus in Seed Potatoes
Coherix, Inc.	\$89,970	Advanced Automated In-Line Inspection of Brown, Freckled and Mixed-Type Eggs to Detect Contamination and Defects
Sims Brothers, Inc.	\$90,000	Pelleted sericea lespedeza diet for control of Internal parasites and pathogens in goats and sheep
TessArae, LLC	\$89,652	Resequencing Microarray-based Diagnostic Assay for High Priority Swine Infectious Diseases
Brookings Biomedical	\$90,000	Multivalent Mucosal Vaccine to Include Swine Influenza
Megastarter, LLC	\$90,000	Improving the stability and concentration of Megasphaera elsdenii NCIMB 41125
Applied Science Products, Inc.	\$89,890	Sustainable Nitric Acid Production Using Non-thermal Plasma
Eltron Research & Development Inc.	\$90,000	Retrofit Emissions Control Technology for Agricultural Diesel Sources
The Nitrate Elimination Company, Inc	\$89,093	Enzyme-based Test Kits for Phosphate
Giner, Inc.	\$89,920	Advanced Field-Deployable Monitor of Multiple Pesticides in Water
D.R.T.S. ENTERPRISES LTD.	\$75,431	Injected Pressure Compensating Dripper
Wastewater Compliance Systems, Inc.	\$90,000	Rural Wastewater Treatment Lagoon Enhancement with Dome Shaped Submerged Bio-film Devices
Veris Technologies, Inc.	\$89,688	In-Field Soil Phosphorus Measurement System
Innovative Educational Resources, LLC	\$88,841	A Multifaceted Community Approach Preventing Child Obesity Through Standards-Based Classroom Instruction Using an Interactive Inform Tech
ChemFree DeFoam, LLC	\$80,000	Non-chemical In-situ Foam Control for Food Processing

Jersey Flora, Inc	\$90,000	Lily Bulbs A Functional Food for the Prevention of Type 2 Diabetes
Futuresoft Inc., dba Positive Records	\$88,529	Hip Hop Food Pyramid - Obesity Prevention, Nutrition Education and Physical Activity Promotion Using Soul Music
Orbital Technologies Corporation	\$90,000	Non-Thermal Sanitation by Atmospheric Pressure Plasma (SAPP)
Prove It, LLC	\$90,000	High Thermal Regeneration Magnetic Induction Food Processing
Humanitas, Inc.	\$90,000	Creating an Interactive Technology That Emulates the Motivational Interviewing Process to Train Nutrition Educators and Health Professionals
Rubicon Foods LLC	\$90,000	Development of Shelf-Stable Puree Protein for Dysphagia Patients
Antel BioSystems, Inc.	\$79,350	Diagnostic Assay for Mycobacterium bovis in Bulk Tank Milk
Bioo Scientific	\$80,000	Sequential injection enzymatic assay for melamine detection in food.
Applied Food Technologies, LLC	\$79,310	Traceability of Shrimp Utilizing Trace Elemental Analysis
Wind Lift Technologies	\$89,408	Innovative Small Vertical Axis Wind Turbine Uses Lift to Generate Power Providing A Lighter Weight, Less Costly, Rural Wind Power Solution
Lynntech, Inc.	\$89,999	Novel Aqueous system for Electrochemical Generation of Ammonia
Hudson Simulation Services, LLC	\$86,072	Research and Development to improve Rural Emergency Medical Services Training using Mobile Simulation
Twilight Training LLC dba ViaSim	\$89,751	Research and Development of a Simulation-Based Integrated Infrastructure Analysis Tool
Babble Tree LLC	\$85,760	The Babble Tree English Language Learning Tool-Kit: Early Vocabulary Intervention For Latino Non-English Speaking Students
Secure Banking Solutions, LLC	\$89,600	Integrated Information Security Management System for Rural Small & Medium Sized Entities (rSME-IISMS)
Crile Carvey Consulting, Inc.	\$89,985	Integrated Analytical, Visualization, And Decision Support Software for Placement of Wind Turbines by Rural Residents And Small Businesses

Airstreams Renewables, Inc.	\$89,483	Online, Internet-Based Training For Wind Technicians Work On Wind Farms
XW, LLC	\$90,000	Rural Broadband Access Enabled by Adaptive Filter Bank Modulation
Learnimation, LLC	\$89,999	Math & Science Education for Students with Learning Difficulties: Distance Learning Word Problem Intervention Materials
Harrisvaccines, Inc.	\$79,700	Replicon Particle Vaccine for White Spot Syndrome Virus in Marine Shrimp
Pemaquid Oyster Company, Inc.	\$89,952	NE shellfish farming candidate: Factors regulating survival & growth of <i>Arcite surfelam</i> & <i>Mactromeris polynyma</i> in experimental field studies
Virgina Cobia Farms	\$90,000	Development Of Novel Calcium Receptor Based Mineral Supplementation Technologies For Inland Shrimp Aquaculture
Infoscitex Corporation	\$89,620	Development of a High Sensitivity and Specificity Quantitative Aptamer Assay for Coldwater Disease Management Applications
ProFishent, Inc.	\$89,581	Micro-encapsulation and Nanotechnology Treatments to Prevent Proteolytic Diseases of Aquatic Animals
Taylor Shellfish Company, Inc.	\$90,000	Increasing Efficiency of a Crossbreeding Program for the Pacific Oyster
Aqua Green L.L.C.	\$89,180	Marine Aquaculture Water Reuse and Effluent Treatment Systems: An Integrated Sustainable Approach for Commercial Producers
Compact Membrane Systems, Inc.	\$90,000	Enhancing Biosynthesis of Biofuels from Cellulosic Biomass
Quasar Energy Group, LLC	\$89,854	Development of an Integrated Anaerobic Digestion System for Methane Production from Lignocellulosic Biomass
Lynntech, Inc.	\$90,000	Improved Heterogeneous Catalyst for the Transesterification of Fats and Oils to Biodiesel
World Centric	\$88,628	New Biodegradable Packaging from a Synergistic Combination of Agricultural By-products
Arzeda Corp.	\$90,000	Production of Methyl-Ethyl-Ketone (MEK) from Renewable Feedstock
United Environment & Energy LLC	\$90,000	A Novel Catalytic Reactor for Biodiesel Production
E2E Materials, Inc.	\$89,719	Affordable, Petroleum-Free Green Resins for Manufacture of Composite Building Materials

Renewable Spirits LLC	\$90,000	Coproduction of Peptic Fragments and Biofuels from Citrus Processing Waste
Lynntech, Inc.	\$90,000	Biomass-based Commodity Polymers from 5-Hydroxymethylfurfural
Arvens Technology, Inc.	\$90,000	Pennycress:"A wonder weed to wonder fuel:Developing Commercial Farming Practices for Pennycress"
Advanced MicroLabs, LLC	\$90,000	Cost-Effective Biomass Conversion via an Online Carbohydrate Monitoring Device
Irv & Shelly's Fresh Picks	\$81,067	Most efficient ways to aggregate, store, pack and ship local food from farms to regional centers: Illinois Pilot Project
The Tea Spot, Inc.	\$60,440	Moving Toward a Sustainable To-Go Container for Hot Beverages in MASS-Market Food Service
Ronald P. Weidenbach dba Hawaii Fish Company	\$90,000	Innovative Marketing of Hawaiian Pongee

2010

Phase II: 38 Projects Funded for a Total of \$14,814,519

<u>Company Name</u>	<u>Award Amount</u>	<u>Project Title</u>
BioPulping International, Inc.	\$400,000	A Novel Sulfite Pretreatment Process (SPORL) for Efficient Biochemical Conversion of Woody Biomass to Bioethanol
Summerdale, Inc.	\$338,549	Organic Acid Formulations for Wood Protection: Inhibition of Mold and Decay Fungi
Giner, Inc.	\$399,498	Electrochemical Ammonia Monitor for Agricultural Operations
Hansen Energy and Environmental	\$400,000	Anaerobic Production of biohydrogen from food and Agricultural waste
Mainstream Engineering Corporation	\$399,733	A Biogas-Tolerant Engine-Generator for Advanced Agricultural Waste Management Systems
TDA Research, Inc.	\$400,000	Desulfurization of Biogas Derived from Animal Manure
This Old Farm, Inc	\$398,341	Value-Added Multi-Purpose Processing Establishment using Renewable Energy for Local Foods Distribution Network

Eldertide LLC	\$399,974	Developing Elderberries As A Specialty Crop By Supporting A Growers' Network And By Conducting Prototype Development Of Nutraceuticals
Green Heron Tools, LLC	\$392,225	Research and Development of Alternatives to the Walk-behind Rotary Tiller Suitable for Women Farmers
OCR, Inc.	\$399,974	Agaricus mushroom production utilizing local substrate materials
GrassRoots Biotechnology, Inc.	\$400,000	Improving Root Architecture in Bioenergy Crops
Vista Photonics, Inc.	\$400,000	Optical Ethylene Analyzer for Food Crop Quality Assurance
Cycloptics Technologies, LLC	\$400,000	Next Generation Energy Efficient Supplemental Lighting for Plant Production
Eltron Research & Development Inc.	\$399,998	Regenerable Ethylene Removal
Energid Technologies Corporation	\$400,000	Robotic Mass Removal of Citrus Fruits
AC Diagnostics, Inc.	\$399,957	A Sensitive Single-tube Immunocapture Real-Time RT-PCR for Early Detection of Plant Pathogens in Crops
Divergence, Inc.	\$400,000	Novel Agrochemical Leads Derived from Molecular Fields
AgPollen LLC	\$372,240	Development of a Nest Attractant for the Blue Orchard Bee
Alpha Scents, Inc.	\$400,000	Attract and Kill Technology to Control Citrus Leafminer in Citrus Nurseries and Orchards
Gardens at Post Hill LLC	\$181,646	Cypripedium Meristem Mass Propagation
Eckstein Diagnostics, Inc.	\$400,000	Lipid-based ELISA test for detection of dairy cattle with Johne's disease
Biotronics, Inc.	\$400,000	Hybrid System for Ultrasound Signal, Spectral, and Image Analyses to Enhance Meat Quality Evaluation in Food Animals
Blue Moon Bulbs, LLP DBA Westscape Nursery	\$391,369	The Use of Ion-Accumulating Halophytes for the Phytoremediation of Saline and Selenium Impacted Soil and Water in Cold-Arid Climates
Z4 Energy Systems, LLC	\$400,000	Wind Powered Water Pumping Incorporating Compressed Air Energy Storage
Veris Technologies, Inc.	\$356,550	Automated, In-Field Measurement System For Soil Nitrate And Other Properties

Schillinger Genetic, Inc.	\$400,000	Ambient Processing and Nutritional Assessment of Reduced-Trypsin-Inhibitor & Low Oligosaccharide Soybean Products
Mainstay, Inc.	\$400,000	Technology-based Interventions to Improve the Nutrition and Health of Intellectually and Developmentally Disabled Persons
Clean Plus, Inc.	\$398,739	Corn Stover Sorbent Granules
Webfish Pacific	\$400,000	Early Childhood Oral Health Initiative for Rural Families
Baxter Land Company, Inc.	\$390,904	Commercial-Scale Implementation of Blue-Catfish Germplasm for Hybrid Production
Virginia Cobia Farms, LLC	\$400,000	Optimizing Inland Tank Based Recirculation Aquaculture Methods To Produce Cobia Under Reduced Water Salinity Conditions
Bagaduce River Oyster Company	\$400,000	Hard clam farming in eastern Maine: field experiments to evaluate biological & economic efficacy of field-based nursery and grow-out phases
Mayaterials, Inc	\$398,972	Conversion of Agricultural Waste into High Quality Insulation for Energy Conversion
Compact Membrane Systems, Inc.	\$400,000	Low Cost Fuel Grade Ethanol
Kuehnle AgroSystems, Inc.	\$400,000	Preservation of Bioprocess Algae for Certified Seedstock
Native Seedsters, Inc.	\$400,000	Seedster Technology for More Seed Recovery, Less Impurities and Faster Ground Speed Harvesting Camelina for Biodiesel Feedstock
United Environment & Energy LLC	\$400,000	One-step Biodiesel Production from Yellow Grease
Cronus, LLC	\$395,850	Formulation of Biodegradable Nursery Pots from Poultry Feather Keratin Cronus, LLC

2011**Phase I: 56 Projects Funded for a Total of \$5,527,026**

<u>Company Name</u>	<u>Award Amount</u>	<u>Project Title</u>
MetroCrops, LLC	\$ 95,914	Use of Hydroponic and LED Technology to Grow High Nutrient Lettuce, Spinach and Arugula in a Small, Urban, High Density, Indoor Farm
AZYP, LLC	\$99,925	Removal of Isomeric Ballast in Agrochemicals Using an Inulin Based Agro-Product
4Cs Breeding Technologies Inc.	\$97,655	New Technology for Breeding Superior Tetraploid and Triploid Eastern Oysters

ISCA Technologies, Inc.	\$100,000	Zebra Chip Diagnosis
Sciessent, LLC	\$ 99,416	Silver Ion Formulations for the Control of Bacterial Plant Pathogens and to Reduce Bactericide Resistance and Health Risks
Bioprotection Systems Corporation	\$100,000	Development of a safe and efficacious vaccine for Rift Valley fever virus
BioTracking LLC	\$99,712	A Combinatorial Approach For Microbial Sensing Using Multi-Layered Nanoparticles Based On Surface Enhanced Raman Spectroscopy (SERS)
Azavea Inc.	\$100,000	Urban Forestry Modeling and Prioritization Tools
Fiberstar Bio-Ingredient Technologies	\$98,016	Evaluation of Various Low Cost Natural Plant Materials as Raw Materials for Patented Processing Techniques
Phycal, Inc.	\$100,000	Novel Method For Improving Algae Harvesting
Trellis Growing Systems LLC	\$99,926	Modular Shading Structure for High Value Fruits and Vegetables
Infinite Energy, LLC dba Infinite Enzymes	\$100,000	Formulating New Cellulases for Diverse Markets: Defining QA Parameters
Diligent Consulting, Inc.	\$99,911	Immersive Environments for Nutrition Education
Intralytix, Inc.	\$99,984	Development Of Phage Preparation For Managing Salmonella In Foods
eGen LLC	\$98,750	eGen Low Flow Hydrokinetic Renewable Energy Harvester
Eden's Bowl, Inc.	\$98,833	An Integrated Market System Model for Small & Medium-Sized Farms
AXAT Inc.	\$99,942	The Feasibility Of Developing A Low Cost, Remote Sensing Technology To Provide Information Critical To Finfish Hatchery Operations
PolyNew, Inc	\$100,000	Biobased and Biodegradable Impact Modifier for Completely Renewable Bioplastic
Mitebee Farm Incorporated	\$100,000	Production Of Native Bumble Bees For Pollination Of West Coast Crops
Nutrascorb LLC	\$99,882	Targeting Childhood Obesity: Natural, Low Sugar Snacks With Concentrated Fruit Polyphenols

Simplex Manufacturing Co.	\$89,927	Investigation of Fire Fighting Gel Injection For Use With Helicopter Water Tank System to Combat Forest Fires
ISCA Technologies, Inc.	\$100,000	SPLAT ACPAB A&K for the Management Of The Asian Citrus Psyllid, The Key Vector Of Citrus Greening.
Marrone Bio Innovations, Inc.	\$99,800	Development Of Bioherbicides For Rice Weed Control
Brookings Biomedical	\$100,000	Development Of A Simple Killed Enterotoxigenic E. Coli Vaccine For Weaned Pigs
Searchlight Sensors	\$100,000	Low Cost Optical Ammonia Monitor
KidsCOOK Productions, LLC	\$100,000	The project "KickinKitchen.TV" - An Interactive Digital Learning Technology Program.
Invention House LLC	\$95,513	Novel Solar Concentrator Trough with Front-side Support Structure
Sensor Development Corporation	\$99,809	Monitor and Control the Formosan Subterranean Termite in Forest Resources Using an Application of a New Science and Technology Phase I
Scenic Valley Farm, LLC	\$98,815	Environmental Management Systems using Renewable Energy
EngenNano Technology Inc.	\$99,457	Development Of An Efficient Solid State Grow-Light For Greenhouse/Urban Agriculture Based On A Novel Growth Process And Device Architecture
Sensor Development Corporation	\$99,755	Detect the Lesser Grain Borer in Stored Grain Using an Application of a New Science and Technology Phase I
Amelgo, LLC	\$100,000	Development Of Effective Non-Antibiotic Dry-Off Agents For The Dairy Industry
Aquaculture Systems Technologies, LLC	\$76,978	Use of Direct Filtration on the Influent to Floating Bead Filters and Treatment of Waste Discharge with Coagulation Aids for Suspended Solid
Pacific Planktonics	\$100,000	Larval Nutrition Strategies For Improved Tuna Hatchery Production
Renewable Alternatives, LLC	\$100,000	Enhanced Thermal Activity of Vegetable Oil Based Thermal Energy Storage Materials

3F, LLC	\$100,000	Modification of Natural Fibers for use as Reinforcement in Advanced Composite Materials
Medigen, Inc.	\$99,892	Polyvalent Vaccine to Protect Poultry from Avian Influenza
CFD Research Corporation	\$99,991	Novel Dewatering Method for Cost Effective Harvesting of Microalgae Biomass
ISCA Technologies, Inc.	\$100,000	Effective Semiochemical Management of the Oriental Beetle for the Small Blueberry Grower
Geo Spider, Inc	\$98,809	Over the Top Citrus Harvesting Equipment for Process Market Fruit in High Density Citrus Groves
BIOWORKS INC.	\$99,510	A Novel Biological Control For Fungal Plant Pathogens
Intelligent Optical Systems, Inc.	\$100,000	Distributed Optical Fiber Sensor Cable for Air Quality (Air-Sense)
Acclima, Inc.	\$99,395	Soil profile water content sensing system based on TDR
Agricultural Information Management, Inc.	\$96,700	Development Of An Automated, Mobile Pasteurizer For Food Products In Global Communities.
Altaeros Energies, Inc.	\$99,964	Robust Airborne Wind Turbine Shroud for Production of Low Cost Renewable Energy
Robert Miller Consulting LLC	\$99,990	Enriching Rural American Farmers And Their Communities By Enabling Broadcasters To Power Transmitters With Wind Energy
Exelus, Inc.	\$100,000	New Drop-in Biofuel to Meet Renewable Fuel Standards
Wilson's Cedar Point Farms, LLC	\$99,961	Production and Marketing of a Novelty Specialty Pepper, Capsicum baccatum
OrganiPharm, LLC	\$99,840	Marketing a New Paradigm in Goldenseal Product Standardization
Agdia, Inc.	\$100,000	Sequence Specific, Nucleic Acid Separation Media for Plant Pathogen Diagnostics
Vista Photonics, Inc.	\$100,000	Isotope Ratiometer for Groundwater Analysis

Solar-Stream, LLC	\$89,500	The Flex Pump - An Innovation in Solar Water Pumping
Step Analysis LLC	\$100,000	Developing A High Sensitivity High Specificity Lameness Detection System For Dairy Cattle
Whole Trees LLC	\$99,689	Structural Testing of Round Branched Timbers
Innovosoy, Inc.	\$99,790	Global Feed in 3-D: An Information Technology Product for Strategic Decision Making and Market Analysis
Applied Food Technologies, Inc.	\$96,075	Definitive Molecular Markers for Speciation of Tuna: Genus Thunnus

2011**Phase II : 40 Projects Funded for a Total of \$17,108,174**

<u>Company Name</u>	<u>Award Amount</u>	<u>Project Title</u>
Azavea Inc.	\$460,000	OpenTreeMap: Tools for Collaborative Urban Forestry
HM3 Energy, Inc.	\$460,000	Practical Torrefaction of Forest Waste for Conversion into Clean Fuel for Coal-fired Power Plants
GreenWood Resources, Inc.	\$460,000	Alder Genetic Improvement for the Pacific Northwest Forest Products Industry
Biogas & Electric, LLC	\$460,000	Novel Approach To Nox Reduction In Biogas Engine Exhaust From Anaerobic Digestion Facilities At Dairy Farms.
Pacific Biodiesel, Inc.	\$460,000	Aina Mo Soil Amendment Project: Organic Compound From Biodiesel Glycerin Co-Product To Control Apple Snail (P. Canaliculata) On Wetland Taro
Mountain Meadow Wool Co. Inc.	\$460,000	Establishing On-site Effluent Treatment of Wastewater from Small-Scale Wool Processing Facilities
Quantalux, LLC	\$460,000	A Biogas Heat Engine for Small to Mid-Sized Farms
Science and Sensors Technologies	\$460,000	Optical Fiber Sensor for Plant Nutrients
Capstan Ag Systems, Inc.	\$460,000	Development Of An Integrated Actuator For Real Time Control Of Spray Nozzle Flow Rate And Droplet Size Spectrum
ISCA Technologies, Inc.	\$460,000	Accurate Huanglongbing (HLB) Diagnosis
Orbital Technologies Corporation	\$460,000	LEDs for Managing Pest Insects in Greenhouses Phase II
BioStrategies-LC	\$460,000	Plant Produced Porcine IL-12 Vaccine Adjuvant for Swine Flu and Other Viral Diseases
ISCA Technologies, Inc.	\$460,000	SPLAT BASE: A Revolutionary Attract And Kill Technology To Effectively Manage Orchard Pests.
NovaFlora Inc	\$460,000	Development Of Marker Free Crown Gall Resistant Roses.

Sims Brothers, Inc.	\$460,000	A Pelleted Sericea Lespedeza Supplement For Control Of Internal Parasites On Small Farms
Coherix, Inc.	\$460,000	Automated High-Speed Inspection of Brown and Brown-Speckled Eggs in Production Processing to Detect and Classify Surface Contaminants
Vortant Technologies, LLC	\$460,000	Self Contained Sensor and Telemetry for Remote Water Quality Monitoring
Giner, Inc.	\$460,000	Advanced Field-Deployable Monitor of Multiple Pesticides in Water
Technova Corporation	\$460,000	Development of an Inexpensive, Rapid and Highly Sensitive Perchlorate Nanobiosensor
Applied Geosolutions	\$460,000	Building an Operational Tillage Information System (OptIS)
The Nitrate Elimination Company, Inc.	\$460,000	Enzyme-based test kits for Phosphate
Innovative Educational Resources LLC	\$460,000	A Community Focused Participatory Research Program to Evaluate COSolutions
Compact Membrane Systems, Inc.	\$460,000	Solvent Recovery from Vegetable Oil Miscella by Novel Solvent-Resistant Nanofiltration Membranes
Edenspace Systems Corporation	\$460,000	Production of a Value-Added Crop for Greater Human Nutrition
Industry Vision Automation Corporation	\$441,863	Hyperspectral Fluorescence Imaging Detection System for Black Walnut Shell Fragments Recognition and Removal
TessArae, LLC	\$460,000	Validation of a Multiple Food-borne Pathogen Detection and Strain-Level Identification Assay
Sonsight Inc.	\$460,000	Farm-Sized Low Windspeed Turbine
OmniGreen Renewables LLC	\$460,000	An Integrated BioGas-Solar Dehydration System: Increasing Sustainability through Value-Added Agriculture
Learnimation, LLC	\$460,000	Early Math & Science Intervention for Rural Communities
Harrisvaccines, Inc.	\$460,000	Replicon Particle Vaccine for White Spot Syndrome Virus in Marine Shrimp Phase II
Multi-Duti Manufacturing, Inc.	\$369,516	High Efficiency Axial Flow Pump
Arvens Technology, Inc	\$460,000	Creating a Pennycress Bioenergy Business
Carbo Analytics, LLC	\$460,000	Less Expensive Biofuel Production enabled by an Online Carbohydrate Monitor
World Centric	\$456,795	Compostable Packaging from Agricultural Residues
Compact Membrane Systems, Inc.	\$460,000	Venting of Underground Storage Tanks Containing Ethanol-Gasoline Blends
Lynntech, Inc.	\$460,000	Improved Heterogeneous Catalyst for the Transesterification of Fats and Oils to Biodiesel

The Tea Spot, Inc.	\$460,000	Optimizing Marketing Strategy and Consumer Connection for a Corn-Based Compostable To-Go Tea Filter in Mass Foodservice
Vision Robotics Corporation	\$100,000	Closed Loop Robotic Arm Control for Agricultural Applications
Cognisense Labs Inc.	\$100,000	POSE: Polarized Object Sorting Engine

2012**Phase I: 63 Projects Funded for a Total of \$6,234,159**

<u>Company Name</u>	<u>Award Amount</u>	<u>Project Title</u>
Xiomas Technologies, L.L.C.	\$100,000	Staring Wide Area Imager (StareWAI) for Disaster Response and Earth Science
Applied Biotechnology Institute, Inc	\$99,983	Use of Cellulase-containing Maize to Lower Cost of Forest Products Biofuels
ISCA Technologies, Inc.	\$100,000	SPLATverb, a Drop-In technology to Manage the Mountain Pine Beetle
Greenwood Resources, Inc.	\$100,000	Hybrid Poplar Breeding for Improved Water use Efficiency for Short Rotation Tree Farming Under Semi-Arid Conditions
N-Ovation, Inc.	\$99,598	Development of an Efficient On-Farm Fertilizer Manufacturing System Utilizing a Pulsed Microwave Air to Nitric Oxide Plasma Reactor Power
ISCA Technologies, Inc.	\$100,000	Protecting Hawaiian Small Farm Production from Bactrocera Fruit Flies
Greenwood Clean Energy, Inc.	\$97,640	Evaluating Sources and Control method for small Scale Hydronic Heaters
Farmhand Foods	\$99,860	Farmhand Foods: Developing Innovative Business and Marketing Strategies that Create market Opportunities for Small-Scale Livestock Producers
Top 10 Produce LLC	\$100,000	Encouraging Small Farms to Adopt GS1 Food traceability Technology Through Branded a "Click-to-Play" Mobile Technology and Marketing Alliance
Highest Wind, LLC	\$100,000	Feasibility Demonstration Of A Wind Energy Glider For Renewable Energy At Small And Mid-Sized Farms
Hevva	\$100,000	Comparison Of Agricultural Marketing Success Across Multiple Platforms
TDA Research, Inc	\$100,000	Ambient Temperature Oxidation Catalyst for Ethylene Control in Fresh Produce Containers
ISCA Technologies, Inc.	\$100,000	Dual-Mode Nanosensory Platform For Citrus Tristeza Virus Detection
Exactheat LLC	\$93,011	Connection Of Electrodes On Polymer Based Heating Elements

WISER Systems Inc.	\$100,000	Wireless Sensor (WISER) Track-and-Trace: Autonomous, Cost Effective, Item-Level Food Safety from Field to Fork
Geo_Spider, Inc	\$99,023	Over the Top Citrus Harvesting Equipment for Fresh Markets in High Density Groves
AgSquared, LLC	\$100,000	Developing Grower-Centric Online Software Prototype To Enable Vegetable Producers To Collect Accurate And Timely Crop Harvest Information
Cibus US LLC	\$99,980	Disease Tolerance In The Solanaceae
Vestron Corporation	\$95,583	Enhancement Of Insecticidal Peptide Delivery
ISCA Technologies, Inc	\$100,000	REPEL ZC to Manage Potato Psyllids
Maureen Miek Masuda Fitch	\$100,000	Evaluating the feasibility of Commercializing Genetically Engineered Nematode Resistant Anthuriums
Mycosyntetix, Inc.	\$100,000	Production Of Organic Herbicide Mevalocidin By Fungi
Agri-Analysis LLC	\$100,000	Nanobidiesas Novel Reagents For Accurate And Rapid Identification Of Viral Pathogens In Specialty Crop Plants
Diagenetix, Inc.	\$99,778	Mobile Gene-Based Diagnostics for the Agricultural and Food Processing Industry
BioLink Life Science, Inc	\$97,215	Enhanced Hemoglobin Production In Neonatal Piglets With FCP, A Low Molecular Weight Iron Chelate
Sea Star International, LLC	\$99,512	Production Of A New Vaccine For Poultry To Prevent Salmonella
Pathovacs Incorporated	\$99,750	Immunologically Cross Reactive Proteins For Broadly Protective Campylobacter Chicken Vaccines
Owl Biomedical, Inc.	\$100,000	MEMS-Based Sperm Cell Sorting For Agricultural Breeding Programs
Pan Genome Systems, Inc.	\$99,682	Novel Vaccines for John's Disease
Q-Track Corporation	\$100,000	Q-Track Milk Operations Optimization System
Eureka genomics Corporation	\$99,782	Bovine Parentage Genotyping By Highly Multiplexed Next Generation Sequencing
Mesa Photonics, LLC	\$99,999	Low Cost Ammonia Sensor For Agricultural Emissions.
Skolex Biotechnologies	\$100,000	Improved Strategies For Elevated Vermicomposting Systems
OndaVia, Inc	\$100,000	Portable Herbicide Monitor
Los Gatos research	\$99,569	Laser-Based sensor for Nitrate Isotope Analysis in Water Pollution Monitoring
HydroBio, Inc.	\$99,956	Remotely-Sensed Irrigation Control Expert Systems (RICES)
Kansas Environmental Management Associates, LLC	\$99,426	Phosphorus Removal From Ethanol Thin Stillage To Produce A Low Phosphorus Livestock Feed And A Valuable Granular Fertilizer.

Physical Sciences, Inc	\$100,000	Novel Air Processor for the Removal of Ammonia Gas From CAFO Air Streams
HansonTech Consulting	\$100,000	Innovative High-Airflow Smokehouse Design With The Novel Method Of Controlling Airflow To Cook Faster & To Reduce Temperature & Color Variation
Modern Meadow, Inc.	\$92,488	Engineered Comestible Meat
Orbital Technologies Corporation	\$100,000	LED Lighting For Maximizing Quality Parameters In Specialty Crop Production
Apto Tec, Inc	\$100,000	Preventing Bone Loss and Weight Gain with Combinations of Vitamin D and Phytochemicals
UES, Inc.	\$100,000	Real-time Detection of Food-borne pathogens and Toxins
Prosperity Organic Foods, Inc.	\$100,000	Development of Rich & Creamy <i>MeltA</i> ® Cooking Blend for Taste, Nutrition, Oxidative stability and Reducing Childhood Obesity
Lynntech, Inc.	\$99,999	Rapid Detection of Mycotoxins
Krell Energy Efficiency, LLC	\$99,939	Energy Efficiency for Rural Communities
Learnimation, LLC	\$99,600	Math & science Problem Solving Intervention for Rural Communities
The Julia Group	\$99,920	Dakota learning: Computer-Assisted Mathematics Instruction in a Cultural Context
Automated Medical Diagnostic LLC	\$99,832	Metadata Assisted Management Of Diabetes In Rural Health Disparity Communities
Agri Wind Turbines	\$100,000	Using A Modified Grain Silo To Power A Vertical Axis Wind Turbine
Troutlodge Inc.	\$84,329	Genetic Sex Reversal Of Rainbow Trout
Northside Enterprises	\$99,496	Spawning, Fry Production And Hybridization Technologies For Producing Walleye For Foodfish And Stocking
Lingren-Pitman Inc.	\$97,692	Mechanical Scrubber For Aquaculture Netting
PhycoBiologics, Inc.	\$100,000	Novel Low Cost Extraction Of Algal Oils Used In Fish Feeds.
DAST LLC dba Prairie AquaTech	\$99,500	Production Of High Protein Distillers Dried Grains With Soluble (HP-DDGS) To Replace Fish Meal In Aquaculture Diets
Pemaquid Mussel Farms, LLC	\$99,780	Development Of A Modular Submersible Mussel Raft For Use In Semi-Exposed Maine Waters Subject To Drift Ice
Logos Energy, Inc.	\$100,000	RNA Interference-Based Oral Therapeutic For White Spot Syndrome Virus In Shrimp
Piedmont Biofuels Industrial, LLC	\$99,890	Robust and Sustainable Utilization of Biofuel Co-Products to increase Biorefinery Diversification
Organix, Inc.	\$83,736	Demonstration of an Affordable and Scalable Anaerobic Digester and Fiber Processing system for dairy Manure

TDA Research, Inc	\$100,000	Sustainable Green Diesel Production: Upgrading Biomass Waster Pyrolysis Oil
Panorama Research, Inc.	\$98,739	Gratuitous Inducer for Industrial Enzyme Production
Dast LLC	\$99,875	Engineering Photosynthetic Cyanobacteria to Produce the Energy-Dense Fuel Farnesene from Carbon Dioxide
Technology Holding, LLC	\$99,997	Novel Process for Production of Fatty Acids from Lignocellulosic Biomass

2012**Phase II: 26 Projects Funded for a Total of \$10,671,668**

<u>Company Name</u>	<u>Award Amount</u>	<u>Project Title</u>
Azavea Inc.	\$450,000	Urban Forestry Modeling and Prioritization Tools
Whole Trees, LLC	\$361,500	Structural testing of Branched Timber and Truss Assemblies
Mainstream Engineering Corporation	\$100,000	A Biogas-Tolerant Engine-Generator for Advanced Agricultural Waste Management Systems
Sea Star International LLC	\$450,000	Antimicrobial Combinations that help Protect Against Salmonella spp. & L. monocytogenes in Organic & Natural Poultry Products
ISCA Technologies, Inc.	\$450,000	A Guava-Volatile-Based Repellent Formulation To Manage The Asian Citrus Psyllid, The Key Vector To Citrus Greening
Innovosoy, LLC	\$450,000	Global Feed in 3-D: An Information Technology Product for Strategic Decision Making and Market Analysis
Vision Robotics Corporation	\$450,000	Closed Loop Robotic Arm Control for Agricultural Applications
Sensor Development Corporation	\$449,852	Detect the Lesser Grain Borer in Stored Grain Using an Application of a New Science and Technology Phase II
ISCA Technologies, Inc.	\$450,000	SPLAT ACPAB A7K for the management of the Asian citrus psyllid, the key vector of Citrus Greening
Z4 Energy systems, LLC	\$450,000	Solar heater to Prevent Stock Tank Freezing
JDC, Inc.	\$100,000	Improved Hard Process; Breakthrough Kiln Process for Manufacturing Phosphoric Acid
Intelligent Optical Systems, Inc.	\$449,978	Distributed Optical Fiber Sensor Cable for Ail Quality (Air-Sense)
Multiform Harvest, Inc.	\$448,947	Research And Development Leading To Commercial Feed And Fertilizer Products Made From Struvite Extracted From Dairy Wastewater.
Acclima, Inc.	\$450,000	Soil Profile Water Content Sensing System Based On TDR
Nutrasorb LLC	\$449,740	Targeted Childhood Obesity: Natural, Low Sugar Snacks With Concentrated Fruit Polyphenols
Intralayix, Inc.	\$449,865	Phage Preparation For Managing Salmonella On Foods

Applied Food Technologies, Inc.	\$450,000	Definitive Molecular Markers for Speciation of Fresh and Canned Tuna: Genus Thunnus
KidsCook Productions	\$450,000	KickinKitchen.TV- An Innovative, Digital Learning Interactive Educational Program On Nutrition, Cooking, And Active Lifestyles.
Robert Miller Consulting LLC	\$449,840	Enriching Rural American Farmers and Their Communities By Enabling Broadcasting To Power Transmitters With Wind Energy
Babble Tree, LLC	\$448,041	English Language learning Toolkit: Early Vocabulary Intervention study for Latino Non-English Speaking Students
Altaeros Energies, Inc.	\$450,000	Robust Airborne Wind Turbine
Hudson Simulation Services, LLC	\$395,248	Research and Development to improve Recruitment and Retention in Rural Emergency Medicine Using Mobile Simulation
ProFishent, Inc.	\$269,392	Micro-encapsulation and Nanotechnology Treatments to Prevent Proteolytic Diseases of Aquatic Animals
PolyNew, Inc	\$449,808	Biobased and Biodegradable Impact Modifier for Completely Renewable Bioplastic
Infinite Energy, LLC dba Infinite Energy	\$450,000	Formulating New Cellulases for Diverse Markets: Defining QA Parameters
Compact Membrane Systems, Inc.	\$450,000	Enhancing Biosynthesis of Biofuels from Cellulosic Biomass
Sonsight Inc.	\$460,000	Farm-Sized Low Windspeed Turbine
OmniGreen Renewables LLC	\$460,000	An Integrated BioGas-Solar Dehydration System: Increasing Sustainability through Value-Added Agriculture
Learnimation, LLC	\$460,000	Early Math & Science Intervention for Rural Communities
Harrisvaccines, Inc.	\$460,000	Replicon Particle Vaccine for White Spot Syndrome Virus in Marine Shrimp Phase II
Multi-Duti Manufacturing, Inc.	\$369,516	High efficiency axial flow pump
Arvens Technology, Inc	\$460,000	Creating a Pennycress Bioenergy Business
Carbo Analytics, LLC	\$460,000	Less Expensive Biofuel Production enabled by an Online Carbohydrate Monitor
World Centric	\$456,795	Compostable Packaging from Agricultural Residues
Compact Membrane Systems, Inc.	\$460,000	Venting of Underground Storage Tanks Containing Ethanol-Gasoline Blends

2013

Phase I (59 Projects Funded for a Total of \$5,762,650)

<u>Company Name</u>	<u>Award Amount</u>	<u>Project Title</u>
Westscape Wholesale Nursery LLP	\$100,000	The Selective Control of Cheatgrass (Bromus tectorum L.) with Low-Cost Application of a Naturally Occurring Phytotoxic

		Element
Whole Trees, LLC	\$99,963	Forest to Factory: Round Timber Supply Chain Tools and Techniques
TDA Research, Inc.	\$100,000	A Regenerable Sorbent for Deep Desulfurization of Alpha Pinene
Sea Star International LLC	\$99,998	Pilot Program for Recovery of All-Natural medicinal for Arkansas Forests: A Key to Easing Sagging Profitability in the Forest Industry
Enertech Inc.	\$99,947	Advanced Control System for Biofuel
Taber International, LLC	\$80,250	Renewable Energy and Energy System Automation for Energy Plus Farm
Ripple Rock Fish Farms	\$99,982	Researching economic feasibility of the mixed-cell raceway, providing a way for small farms to enter the aquaculture industry
Stony Creek Colors LLC	\$100,000	Novel and Improved Methods for Extracting Colorants from Indigo and Black Walnut
ISCA Technologies, Inc.	\$100,000	Micro-Bait Station Suzukii
Thin Air Nitrogen Solutions LLC	\$99,968	Agronomic, environmental, and economic evaluation of cyanobacterial bio-fertilizer for small and mid-size growing high-value crops
RSI Systems Inc	\$100,000	Automated Inspection and Coding Cases on Produce Package Lines
Spensa Technologies Inc	\$100,000	Electronic Trap for Automated Monitoring of Insect Populations
Forest Concepts, LLC	\$100,000	Low Energy Comminution of Herbaceous Biomass Feedstocks
Applied Nanotech, Inc.	\$99,977	Pathogen Detection and Monitoring from Induced VOCs of Citrus Varietals
NanoSonic, Inc	\$100,000	Solar Powered Colony health Monitoring Systems for Pollinators
Ridge Quest Inc.	\$100,000	Tangler technology, Advanced Mating Disruption that Provides for Rapid and Cost Effective Application
San Luis Obispo Bee Company	\$97,650	Development of BMPs for nest establishment of wild-caught queen Yellow faced bumblebees,

		Bombus vosnesenskii, for greenhouse & outdoor crops
Vestron Corporation	\$99,982	Technology to Enhance Insecticidal Peptides
Plant Advancements	\$100,000	Hybrid Systems for Gene Confinement and Breeding of Perennial Plants Used for Biofuels
Actuated Medical Inc.	\$100,000	Active Needle technology for Cattle to Reduce Insertion Force, Pain and Meat Loss from Injection Scarring while Facilitating Vascular Access
Prota Culture, LLC	\$88,168	Formulating a Competitively Priced Poultry Feed in Hawaii rendered from Organic Wastes Using a Protein-Synthesizing, Beneficial Insect
Lucigen Corporation	\$99,852	Rapid Field-appropriate Diagnostics for Detection of Viral pathogens Associated with Porcine Respiratory Disease Complex
ISCA Technologies Inc	\$100,000	Organic Stable Fly Repellent
I2 Air Fluid Innovation, Inc	\$58,883	Using Elemental Iodine Vapor Bubbles in a Liquid Medium to Inactive Mastitis Pathogens on Cow Teat Surfaces
Micronic Technologies	\$99,357	Innovative Removal of Nitrate and Nitrites from Contaminated Well Water
Montana Gluten Free Processors	\$100,000	Remediation of soil and water contaminated with phenolic compounds using peroxidase from the biofuel crop, Camelina sativa
Reactive Innovations, LLC	\$99,999	Wide Area Hydrogen Sulfide Monitoring System for Agricultural Enterprises
Saint Onge Orchids	\$96,285	A new Irrigation Technique for Control of Pathogens on Internal Surface of Green leaves Produce
Giner, Inc.	\$99,994	Electrochemical, Multi-gas Air Quality Monitor
Nutrient Recovery and Upcycling LLC	\$100,000	Phosphate fertilizer recovery from anaerobic acid digesters in sewage treatment plants
Pliant Energy Systems LLC	\$100,000	Self-Powered Pump to Extract Water from a Flowing water Source

Precision Combustion, Inc.	\$99,686	Compact, Efficient and Economic Soil Steam Disinfestation
All Things Bugs LLC	\$100,000	Ready to Use Therapeutic Food Product to Alleviate Malnutrition in Children Using Insects
Arcadia Biosciences Incorporated	\$100,000	A New Approach for Resistant Starch in Wheat
Abraxis LLC	\$100,000	Development of Immunoreagents and Test Kits for the detection of E. coli non-0157 STEC
Operational Technologies Corporation	\$99,977	Fluorescent DNA Aptamer Test Strips for more sensitive and rapid assessment of food safety
En'Urga Inc.	\$100,000	A Particulate Mass Flux Sensor for the Food Process Industry
Sonomaceuticals, LLC	\$95,200	Grape Bran, A Novel Food Ingredient to Combat Obesity and Metabolic Syndrome Caused by a 'Western diet'
Sonsight Inc.	\$100,000	Low-Cost High-Energy Extended Rotor Turbine
Freedom Photonics LLC	\$99,999	Optical Communication Transceivers for Affordable Broadband Deployment in Rural Communities
ORPC Alaska, LLC	\$100,000	Harnessing Clean River energy with the RivGen Power System
Synthigen LLC	\$100,000	Enhancing rural small business opportunities by developing a low cost heat source and developing the utilization of char as a soil amendment
Smith-Root, Inc.	\$85,371	Electrosedation and rested harvest as strategies to improve the quality of farm-raised fish
Giner, Inc.	\$99,999	On-board Electrochemical Oxygen Generator for Live Shipments of Wild Seafood and Aquaculture Products
HJ Science & Technology, Inc.	\$99,863	Low-cost, Handheld microfluidic device for detection and monitoring of brevetoxins in marine
Intralytix, Inc.	\$99,991	Bacteriophages for reducing <i>Vibrio tubiashii</i> associated mortality of shellfish
Kampachi Farms, LLC	\$99,998	Can the "Blaster" improve the profitability, environmental health and expansion

		opportunities for marine aquaculture?
Navita Premium Feed Ingredients	\$100,000	Superior nutrient availability, reduced metabolic waste and increased energy efficiency in aquafeeds
TransGenada Enterprises, Inc.	\$95,350	Development of IMNV resistant heritable transgenic <i>Litopenaeus vannamei</i>
Baxter Land Company, Inc.	\$89,008	Improving Hybrid Catfish Production Efficiency Through Triploid Induction
Alluvium Biosciences Inc.	\$99,999	Development of a novel biocatalytic fatty acid decarboxylation technology for production of liquid biofuels
Microvi Biotech Inc.	\$99,954	Enhancing the Toxicity Tolerance of Microorganisms for Use in Butanol Production and other Applications
United Environmental & Energy LLC	\$80,000	One-step Biobased Green Gasoline Production from Biodiesel Plant Waste Glycerol
Biogas & Electric, LLC	\$100,000	A Low Cost Method of Creating Liquid Organic Fertilizer from Animal Manure
Rebexsess, LLC	\$100,000	Design of Novel Terpene-Derived Drop-In Biofuels Using Rational Structure Based Enzymatic Engineering: Preliminary Studies
The Nitrate Elimination Company, Inc.	\$100,000	Glycerol Determination in Biodiesel Fuels Using Glycerol Oxidase
TDA Research, Inc.	\$100,000	A New renewable Polymer from Bio Oil
Lygos Inc.	\$100,000	Microbial production of polymer precursors
BioPlastic Polymers and Composites LLC	\$98,000	Polyols Derived from Biomass from Polyurethane Coatings

2013

Phase II (28 Projects Funded for a Total of \$12,386,403)

<u>Company Name</u>	<u>Award Amount</u>	<u>Project Title</u>
ISCA technologies, Inc	\$450,000	SPLATverb, a Drop-In technology to Manage the Mountain Pine Beetle
Xiomas Technologies, LLC	\$450,000	Staring Wide Area Imager (StareWAI) for Disaster

		Response and Earth Science
Firsthand Foods, LLC	\$377,000	Farmhand Foods: An Innovative Food Hub creating market Access for Small and Mid-Sized Livestock Producers
Scenic Valley Farm LLC	\$449,000	A Scalable Environmental Controller with Integrated Solar Thermal Storage and Extraction for Field Protected Agriculture
MetroCrops, LLC	\$448,000	Precision control of UV irradiance and ambient conditions to optimize the nutritional content, quality and consistency of indoor grown lettuce.
ISCA Technologies, Inc.	\$450,000	Effective Semiochemical Management of the Oriental Beetle for the Small Blueberry Grower
Geo-Spider, Inc.	\$449,485	Advancing Over the Top Citrus Harvesting Equipment for Juice Markets in High Density Groves
WISER Systems, Inc.	\$450,000	Wireless Sensor (WISER) Track-and-Trace: Autonomous, Cost-Effective, Item-level Food Safety from Field to Fork, Phase II
AgSquared LLC	\$449,967	Improving harvest data capture, use, reporting, and analysis through integrated software tools for specialty crop producers
TDA Research, Inc.	\$450,000	Ambient temperature Oxidation Catalyst for Ethylene Control in Fresh Produce Containers
Medigen, Inc.	\$395,605	Polyvalent Vaccines to Protect Poultry from Avian Influenza
Pan Genomic systems, Inc.	\$449,720	Novel Vaccines Against Johne's Disease: Phase II trials
HydroBio, Inc.	\$450,000	Targeted Irrigation Management (TIM) and Initial suite of Remotely Sensed Agronomic Tools
Los Gatos Research	\$450,000	Laser-Based Sensor for Nitrate Isotope Analysis Water Pollution Monitoring
OndaVia, Inc.	\$450,000	Rapid, field-ready boron analysis

Prosperity Organic Foods, Inc.	\$450,000	Development and Expansion of melt Organic Baking Fat for Oxidative Stability and Reducing Child Obesity
Orbital Technologies Corporation	\$450,000	LED lighting for maximizing quality parameters in specialty crop production-Phase II
Fiberstar Bio-Ingredient technologies, Inc.	\$450,000	Fat replacement System from natural Plant materials for Improving Food Nutrition, Quality, and Reducing Costs
Beneficial Designs. Inc.	\$449,063	A standardized Assessment Process Supporting Health, Environmental and Economic Benefits of Outdoor recreation facilities to Rural Americans
Learnimation, LLC	\$449,995	Math & Science Problem Solving intervention for Rural Communities
Hubble Telemedical, Inc.	\$449,997	Metadata assisted Management of Diabetes in Rural health Disparity Communities
The Julia Group	\$449,000	Dakota learning Project: Computer-Assisted mathematics Instruction in a Cultural Context
Lindgren-Pitman Inc.	\$448,000	Mechanical Scrubber for Aquaculture Netting
LIG Sciences, Inc.	\$449,991	Slow Release Non-Toxic Antifouling Additives for Coatings used in Aquaculture
Aquaculture Systems Technologies, LLC	\$373,000	Application of Direct Filtration Utilizing Floating Bead Filters and Flocculation Aids for Fine Suspended Solids and Phosphorus Removal
Permaquid Mussel farms, LLC	\$449,000	Development of a modular submersible mussel raft for use in semi-exposed Maine waters subject to drift ice
Sophoro Biotechnologies, LLC	\$449,621	Scale-up of Gratuitous Inducer for Industrial Enzyme Production
Technology Holding LLC	\$449,959	Novel Process for Production of Fatty Acids form Lignocellulosic Biomass

Higher Education Challenge Grants

Mr. Aderholt: Please provide a chart showing the allocation of Higher Education Challenge Grants for fiscal years 2010 through 2013.

Response: This is a competitive program. Data on awards by recipient is provided for the record.

[The information follows:]

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013
Appalachian State University	\$ 0	\$ 140,000	\$ 0	\$ 0
Auburn University	307,000	0	142,760	0
Colorado State University . .	0	140,000	0	0
California State University .	0	140,000	0	0
Clemson University	0	0	142,506	0
Chicago State University . .	0	140,000	0	0
Kansas State University . . .	0	168,000	1,427,364	0
Oklahoma State University . .	0	0	285,283	0
The Pennsylvania State Univ.	0	140,000	0	0
University of Arizona	455,000	0	0	0
University of California . . .	464,000	281,000	0	731,000
University of Delaware	0	0	265,485	0
University of Florida	15,000	716,000	12,896	13,000
University of Connecticut . .	0	140,000	0	29,000
University of Georgia	140,000	0	0	0
University of Idaho	461,000	0	0	0
University of Chicago, Loyola	0	0	28,504	0
University of Minnesota . . .	0	701,000	252,389	0
University of Missouri	0	261,000	0	731,000
University of Nebraska	0	28,000	0	0
University of Tennessee . . .	0	408,000	142,762	0
University of Wisconsin . . .	0	140,000	41,920	0
Purdue University	466,000	0	0	630,000
Iowa State University of Science and Technology . . .	775,000	280,000	856,609	0
Michigan State University . .	288,000	0	0	0
The University of Montana . .	140,000	0	0	0
University of Nevada, Reno . .	100,000	0	0	0
State University of New York	224,000	95,000	0	0
Syracuse University	0	0	713,849	0
University of North Carolina at Greensboro	466,000	280,000	0	0

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013
North Carolina State	0	0	0	292,000
University of Illinois . . .	0	0	0	728,000
Saint Joseph's University . .	0	128,000	0	0
The Ohio State University . .	888,000	0	0	731,000
South Dakota State University	139,000	280,000	0	0
Texas A&M University	0	0	0	292,000
Virginia Polytechnic Institute and State University	68,000	774,000	0	46,000
Subtotal	5,396,000	5,380,000	4,561,000	4,223,000
Federal Administration . . .	226,000	225,000	191,000	176,000
Peer Panel Cost	32,000	37,000	18,000	13,000
Total	5,654,000	5,642,000	4,770,000	4,412,000

Hispanic Education Partnership Grants

Mr. Aderholt: Please provide a chart showing the allocation of Hispanic Education Partnership Grants for fiscal years 2010 through 2013.

Response: This is a competitive program. Data on awards by recipient is provided for the record.

[The information follows:]

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013
South Mountain Community College	\$ 0	\$289,000	\$ 0	\$ 0
California State University Los Angeles	\$290,000	0	0	0
California State University, Fresno	535,000	0	0	240,000
California State University Fullerton	0	555,000	0	295,000
California State University, Northridge	285,000	0	0	245,000
California State University Pomona	0	573,000	202,466	0
California State University, San Marcos	247,000	0	0	0
California State University, Stanislaus	247,000	0	0	0
California State University, Bakersfield	0	0	295,000	0
Dominican University, CA	0	229,000	0	0
Hartnell Community College District	0	0	250,000	0
University of La Verne, CA	0	244,000	0	0
Rancho Santiago Community College District	290,000	0	0	0

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013
The Regents of the University				
Of California	290,000	289,000	0	245,000
University Enterprises Corp, CA .	0	501,000	550,000	0
West Hills Community College				
District	248,000	0	0	0
Colorado, Otero Junior				
College	290,000	0	0	0
Contra Costa Community College .	0	0	295,000	0
Broward College, FL	0	287,000	0	0
Florida International University	290,000	800,000	850,000	825,000
University of Florida	25,000	24,000	25,207	25,000
Northeastern Illinois University	538,000	0	0	0
Eastern New Mexico University . .	280,000	0	0	0
New Mexico Highlands University	290,000	0	295,000	825,000
New Mexico State Univrsity . . .	290,000	800,000	850,000	820,000
University Enterprises Corporation	0	0	0	0
University of New Mexico	0	0	0	0
Regents of the University of				
New Mexico	290,000	0	0	0
University of the Incarnate Word	0	0	295,000	0
University of Puerto Rico	290,000	299,000	280,000	0
University of Puerto Rico				
Mayaguez	0	800,000	850,000	1,025,000
Houston Community College				
System, Texas	689,000	245,000	0	0
Laredo Community College,				
Texas	291,000	0	0	0
Pima Community College	0	0	295,000	0
St. Edward's University, Texas	315,000	0	0	0
Sul Ross State Univ., Texas. . .	290,000	0	0	0
Texas A&M University,				
Kingsville	580,000	800,000	850,000	1,025,000
Texas A&M University,				
Corpus Christi	537,000	247,000	65,039	0
Texas State Univ.-San Marcos . .	0	800,000	862,000	825,000
The University of Texas at				
El Paso	290,000	800,000	1,145,000	965,000

	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013
The University of Texas at				
San Antonio	580,000	0		
University of Texas-Pan American	0	245,000	295,000	295,000
San Angelo, Texas	0	0	0	270,000
University of Houston-				
Downtown, Texas	247,000	0	0	242,000
Subtotal	8,834,000	8,817,000	8,830,000	8,167,000
Federal Administration.	370,000	369,000	369,000	341,000
Peer Panel Costs	33,000	33,000	20,000	18,000
Total	9,237,000	9,219,000	9,219,000	8,526,000

Agriculture and Food Research Initiative (AFRI) Collaborative Research

Mr. Aderholt: Please summarize NIFA's collaborative research projects with the National Science Foundation and other federal research agencies for fiscal years 2009 through 2013. Also describe NIFA's plans for fiscal year 2014. Include the name of the projects, funding levels and purpose.

Response: AFRI funded collaborative projects with other federal research agencies including those provided in the chart below. In fiscal year 2015 NIFA anticipates engaging in one additional collaborative research project, the Food Specific Molecular Profiles and Dietary Biomarkers of Dietary Consumption project with \$5,000,000 of AFRI funds.

[The information follows:]

AFRI Interagency Programs

Title	Year Funded	Collaborators	Total	Purpose
Plant Feedstock Genomics	2010-2014	DOE	\$8,000,000	The goal is to support fundamental research on biomass genomics and provide the scientific foundation to facilitate use of lignocellulosic materials--i.e., nonfood plant fiber--for bioenergy and biofuels.
National Robotic Initiative	2012-2014	NSF, NIH, NASA	\$9,000,000	The goal is to accelerate the development and use of robots in the United States that work beside, or cooperatively with, people.
Ecology and Evolution of Infectious Diseases	2010-2014	NSF, NIH, United Kingdom	\$7,500,000	The goal of this program is to support research on the ecological, evolutionary, and socio-ecological principles and processes that regulate the transmission dynamics of infectious diseases.
Dual Purpose with Dual Benefit: Research in Biomedicine and Agriculture Using Domestically Important Agricultural Species	2011-2014	NIH	\$20,000,000	The goal of this program is to support research that utilizes agriculturally important domestic species to improve both human health and animal agriculture.
Water Sustainability	2010-2014	NSF	\$10,000,000	The goal is to understand and predict the

Title	Year Funded	Collaborators	Total	Purpose
and Climate				interactions between the water system and climate change, land use (including agriculture, managed forest and rangeland systems), the built environment, and ecosystem function and services through place-based research and integrative models.
Climate Prediction Using Earth Systems Modeling	2010-2014	NSF	\$15,000,000	The goal of this program is to improve upon and expand on current modeling capabilities to substantively contribute to the advancement of reliable regional climate predictions.
Disaster Resilience for Rural Communities	2010-2011	NSF	\$2,000,000	The goal of this program was to support research that addressed the vulnerabilities and resilience of rural communities to natural hazards or other risks.
Enhancing Ecosystem Services from Agricultural Lands	2010	EPA	\$3,500,000	The goal of this program was to support research on the ecosystem services in agricultural settings, including agroecosystems and ecosystems that are impacted by agriculture.
Increasing Scientific Data on the Fate, Transport and Behavior of Engineered Nanomaterials	2010	NSF, EPA	\$2,200,000	The goal of this program was to support fundamental and applied research related to engineered nanomaterials.
Carbon Cycle Science	2014	NASA, DOE	\$4,500,000	The goal is to provide critical scientific information about the movement of carbon in the environment and potential near- and long-term changes in the carbon cycle, including the role of and implications for societal actions.

Title	Year Funded	Collaborators	Total	Purpose
Multinational	2014	Canada, New Zealand, 11 EU countries of Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI)	\$500,000	The goal is to facilitate international coordination and collaboration in the climate change and agricultural greenhouse gas research programs.
Food specific molecular profiles and dietary biomarkers of dietary consumption	2014	NIH	\$5,000,000	The goals is the discovery and validation of food-specific and molecular signatures of dietary intake and longtime exposures; develop an inventory and database on the food specific molecular signatures; inform policy and facilitate dissemination of findings to industry and facilitate a framework for coordination and harmonization of research between NIH and USDA.

Peer Panels

Mr. Aderholt: How many peer panels were convened in fiscal year 2013? How many are expected to be convened in fiscal year 2014?

Response: In fiscal year (FY) 2013, an estimated 86 peer panels convened. During FY 2014, NIFA expects to hold about the same number as in FY 2013, or possibly more to include new panels not held in previous years, such as those needed for new programs initiated in FY 2014.

Honoraria and Travel

Mr. Aderholt: Please provide a list of total honoraria and travel paid by NIFA for peer panels for fiscal years 2009 through 2014. What is the budget for peer panels in fiscal year 2015?

Response: The information is provided for the record.

[The information follows:]

Fiscal Year (FY)	Honoraria Costs	Travel Costs
FY 2009	\$537,116	\$1,553,045
FY 2010	\$376,925	\$1,614,656
FY 2011	\$330,926	\$804,677
FY 2012	\$486,261	\$1,524,072
FY 2013	\$625,967	\$1,118,372

For FY 2014 peer panel honoraria costs and travel costs are not yet final. The budget for peer panel costs in FY 2015 is contingent upon 2015 enacted funding levels for NIFA and assumptions are based on program management decisions.

Federally-Recognized Tribes Extension Program (FRTEP)

Mr. Aderholt: Please update the summary provided in the fiscal year 2014 hearing record regarding the Federally Recognized Tribal Extension Program, including potential recipients, number of applicants and a description of the projects that have received funding, for fiscal years 2009 through 2014. Describe NIFA's plan for the program for FY 2015.

Response: The purpose of this program is to support Extension educators who serve Indian Reservations and Tribal jurisdictions of Federally-Recognized Tribes. While this is a competitive grant program, extension offices are established and managed under the auspices of the 1862 Land Grant University in each state. FRTEP projects are funded on 4-year cycles called continuation grant awards. After an initial competition, the award is closed to new applicants until the next four year cycle.

In 2009, NIFA funded 24 new and 4 continuation projects for a total of \$2,860,863. In 2010, the 28 projects were funded for a total of \$2,923,200. In 2011, 36 FRTEP projects were funded for a total of \$3,033,640. In 2012, these same 36 projects were funded for a total of \$3,034,196. In 2013, a new 4-year cycle competition was held for the existing 36 projects for a total of \$2,688,054.

The FRTEP request for applications for FY 2014-2016 are continuation years and awarded at the same amount as 2013 depending on annual appropriations, to the existing 36 projects. The next open FRTEP competition will be held in 2017. The information is provided for the record.

[The information follows:]

These 36 Extension Offices reached 19 states, 78 Federally Recognized Tribes, 42,000 youth contacts and 18,200 farmer contacts.

AK - Tanana Chiefs Conference 2009-2013

The Athabascan tribes of Interior Alaska face a high cost of living, poverty, and an epidemic of preventable disease and suicide. The Tanana Chiefs Conference FRTEP has been a catalyst for positive change for over 20 years and intends to continue its influence over the next four. Program activities are flexible to meet the diverse needs and priorities of 37 tribes, and provide research-based education to compliment cultural values. Subjects covered include gardening, agriculture, nutrition, healthy cooking, food safety and youth development. In the past five years, the number of gardeners in the region has increased by 30 percent as a result of the FRTEP program. This contributes to increased food security and health among the peoples of the Tanana Chiefs Conference.

AK - Vibrant Communities Through Resilient Youth (VCTRY) 2011-2013

This project serves Tribal communities in Dillingham, Alaska, particularly 31 Yu'pik, Alutiiq and Athabascan tribes located in remote rural communities throughout western Alaska. The project will provide 4-H programming and other activities to tribal youth in the isolated villages throughout the area. The FRTEP educator surveyed Bristol Bay tribal youth and found they were seeking more opportunities to learn and to give back to their communities. Most importantly, they are willing to take use their own initiative to improve their communities and are willing to teach others, including younger youth. Their responses indicated a strong connection with their culture through hunting, fishing, berry picking and language. This set the groundwork for future FRTEP youth programs in this region, including an innovative science program.

AZ - Hualapai/Havasupai 2009-2013

The University of Arizona serves the Hualapai and Havasupai tribal communities through youth programs in gardening, livestock and horsemanship. It will also provide opportunities for youth to learn about their land through natural resource education. The projects will be open to all community youth, and will often be based out of youth serving locations in Peach Springs, including the Boys and Girls Club, the Hualapai Juvenile Detention & Rehabilitation Center, Headstart or other programs. A strong focus will be on encouraging youth to continue with post secondary education. The program will strive to inspire adults from many sectors in the community to work with the youth as well as mentors.

AZ - Hopi 2009-2013

The University of Arizona continues to serve the Hopi Agricultural Producers through new market development and by finding ways to enhance Tribal food security. It will help Hopi Youth continue agricultural traditions. In partnership with the Tribal government, this program seeks to improve community capacities on the areas of natural resource management, community development, youth education and improved nutrition for disease prevention.

AZ - Colorado River Indian Tribes 2009-2013

The University of Arizona continues to provide workshops that present researched-based information to Reservation growers, enabling them to make sound management decisions for agricultural crops, such as the control of weeds, insects and pathogens. The program will increase food safety awareness and promote healthy lifestyle choices in order to reverse Reservation trends in obesity, diabetes and heart disease. The outreach will also include trainings in low-desert gardening techniques. It will promote the revival of traditional garden crops, ceremonies and growing techniques. The 4-H program will continue to partner with Boys and Girls Clubs to promote American Indian participation in youth activities.

AZ - San Carlos Apache 2009-2013

The University of Arizona continues to develop the skills, aspirations, attitudes, and behaviors of San Carlos Apache youth through programs in gardening, nutrition, cattle husbandry, horsemanship and 4-H Clubs. The program goal is to encourage youth to adopt Apache traditions that will benefit them and their environment. It will promote post-secondary education for youth at colleges, universities, and technical schools. The Extension educator will show youth that continuing their education not only improves their lives, but also benefits the greater Apache community. To meet this goal, the project will call upon adults from many career sectors in the community to teach, mentor and collaborate with youth.

AZ - Shiprock 2009-2013

The University of Arizona continues to provide the Navajo Nation's farmers and ranchers with demonstrations and workshops featuring experts from local universities and Federal programs. The Extension educator will encourage producers to adopt sustainable agricultural practices by showing farmers how to adopt new technologies. The program will also help producers develop agribusiness plans to address food security within the Tribe. The educator will also spearhead an effort to use focus groups to help the Navajo Nation address food security and food policies as a community.

AZ - Navajo Nation-Western Agency - Tuba City 2009-2013

The University of Arizona offers Navajo Producers an opportunity to increase productivity through a university-developed management and farming strategies. This FRTEP project continues to address health issues on the reservation through its partnerships with the Indian Health Service and the Navajo Nation Departments, particularly in the area of diabetes management. This program will also continue to provide opportunities for youth in the Western Navajo Agency through 4-H, Junior Rodeo and activities involving gardening and nutrition. There are two summer camps: one informs youth of career opportunities in Natural Resources and Agriculture; the other is a wilderness survival camp in a remote area of the Navajo Nation.

AZ - Tri-State/Navajo Nation-Window Rock 2011-2013 (Restored program from 2009)

The University of Arizona plans to advance educational opportunities by pooling resources and leveraging collaborations through the long-standing Navajo Nation Extension Partnership (NEP) with the Navajo Nation Department of Agriculture, Dine College, and Navajo Technical College and Extension providers from three 1862 land grant universities. There will also be partnerships with the Navajo Nation EPA, Indian Health Service personnel and

other tribal and community organizations to more efficiently deliver much-needed agricultural and education-based support services throughout the 27,000 mile Navajo reservation.

FL - Seminole 2009-2013

The University of Florida continues to serve the Seminole tribal community with an extension program that support cattle producers as they improve their farm operations, increasing sustainability and profitability. For example, FRTEP workshops helped Reservation producers achieve higher condition scores, resulting in a 10 percent increase in calving rate which means higher income. Tribal members will also gain access to the University of Florida Soils Lab, through the FRTEP agent. This allows Reservation producers to determine proper fertilization for pastures, resulting in better management and sustainability. The youth development aspects of this project will result in positive behavioral changes and increased social skills and leadership development.

CA - Northwest California Tribal Communities Extension Program 2011-2013

The University of California-Davis will partner with the Hoopa, Yurok, and Karuk tribal members to provide 4-H programs. The project will take youth on college tours, provide career speakers and develop hands-on learning opportunities. For the producers, agricultural workshops will be provided on sudden oak death, hay and poultry production and livestock health. The program will also provide technical assistance to commercial and home horticulture producers so they can increase their incomes. A FRTEP network will link successful county agricultural producers to mentor American Indian farmers and ranchers, so they will achieve higher profitability.

ID - Coeur d'Alene 2009-2013

The University of Idaho supports the Coeur d'Alene Tribe with an extension program that reflects Tribal priorities, including comprehensive youth programming, culturally relevant science, technology and math education and community and economic development. It will also help the Tribe improve food systems and sustaining cultural knowledge. Project activities will include classes, workshops and 4-H programs. The project will also work to increase the knowledge of land tenure issues in order to secure and protect Indian land and resources for future generations. In addition, the program provides financial literacy training.

ID - Fort Hall 2009-2013

The University of Idaho continues to improve profitability of Ft. Hall Reservation ranches and farms. This is achieved through one-on-one support as well as workshops and training. The goal of the project is to improve the genetic quality of beef cattle, reduce the incidence of cattle dystocia on Reservation ranches by half and control trichomoniasis. The Extension educator also teaches financial management classes to increase ranch profitability, and works with the ranching community in an ongoing effort to rehabilitate 25,000 acres of fire damaged rangeland. The project also supports the farming community by working to reduce noxious weeds and through

horticultural workshops. In addition, a youth outreach effort provides programs on agriculture, science, nutrition and life skills.

ID - Nez Perce Tribe Extension Program 2009-2013

This project will focus on empowering American Indian youth, primarily through horsemanship. In addition, it will provide programming on gardening and community development. Programs will be delivered through small groups or one-on-one training. This project will also coordinate with the Nez Perce Tribe's Natural Resource Department, University of Idaho faculty, school districts, and other agencies. Extension offices in the four-county area of the Nez Perce reservation do not have targeted educational programming that serves this Reservation community, primarily because they lack sufficient staffing support, making the FRTEP program the sole Extension resource for the community.

MI - Toward Sustainable, Sovereign Tribal Food Systems 2009-2013

The Michigan State University project will continue to strengthen its partnership with the Bay Mills Indian Community, the Hannahville Indian Community, the Little Traverse Bay Bands of Odawa Indians, and the Sault Ste. Marie Tribe of Chippewa Indians. The proposal recognizes the different food system conditions on the four participating tribes and the need to tailor each Tribe's programs in response to those conditions. A key outcome of this effort will be the instilling of the entrepreneurial environment within the tribal food systems. University staff will continue the Youth Farm Stand Projects (YFSP), which brings youth together to experience the benefits of local agriculture in terms of health and community building, while they develop business management skills.

MN - People Land and Water 2009-2013

The University of Minnesota Program continues to improve the health and well-being of the Band's members by securing indigenous food supplies, reviving traditional Anishinaabe agricultural practices and protecting the Reservation's natural resources. This year, the program will establish demonstration gardens for youth, families, and community members to promote small scale agricultural practices. Gardens will also provide students a place to conduct research and service learning projects. This FRTEP program will also establish a heritage seed bank that meets regional needs of drought tolerance, short growing seasons and frost adaptability. In addition, the program will build upon its previous success in the last grant cycle by continuing to provide technical assistance to the Tribe on wastewater treatment and water quality preservation.

MS - Choctaw 2009-2013

Mississippi State University continues to serve the Choctaw Indian community with more than 30 educational programs, including a Choctaw Farmers Market, which assists Band producers developing and marketing agri-products. The program has built a level of trust with the Band that has resulted in the community gaining better access to Mississippi State University's resources. The FRTEP program has also been helping community members discover careers in agriculture and natural resources, leading to better prospects for them and their families.

MT - Fort Peck 2009-2013

Montana State University will provide Fort Peck Reservation producers with workshops, seminars, and one-on-one support in the traditional extension format in the areas of farm business management, animal stewardship, sustainable farm practices and risk management. The program will also provide non-traditional 4-H programs that can reach over 1,000 youth in need across the reservation. Projects will continue to be educational in nature with a science, engineering, and technology curricula. Other programs will include leadership challenges, junior master gardener, health and nutrition, arts and crafts, culturally significant projects, horse camps, animal science and shooting sports.

MT - Northern Cheyenne 2009-2013

Montana State University continues to connect Northern Cheyenne Elders and Youth in an effort to revitalize cultural and agriculture traditions. It will demonstrate a holistic approach to sustainable agriculture based upon community needs, ethics, and traditions. In addition, it will help the community access heirloom and traditional seeds with a focus on educating the community on traditional seed saving. Northern Cheyenne FRTEP will also continue to provide area youth groups, organizations, and its two 4-H clubs with enriching activities while providing similar opportunities to schools on the Northern Cheyenne Reservation. In addition, Reservation producers will be supported with a pest management tour, trichomoniasis prevention workshops and a farmers market.

MT - Flathead 2009-2013

Montana State University continues to work with farmers and ranchers on pasture and range management, water utilization and livestock production. One-on-one visits, publications and trainings will keep Reservation producers aware of findings in agricultural research, technology advances and updates on key Federal programs. This knowledge will enable farmers and ranchers to make informed decisions that enhance their profitability and result in best management practices. This program will also continue to develop 4-H clubs with leaders who provide Reservation youth with afterschool activities and school enrichment. Adults, teens and elders will mentor elementary-aged youth to foster healthy, meaningful family relationships. Mentors help youth with homework and 4-H projects.

MT - Fort Belknap 2009-2013

Montana State University continues to provide Extension support to cattle producers and youth development. The FRTEP agent will visit family ranches and farms to offer assistance and promote technology literacy through training, with a focus on the women producers. The agent also provides junior agriculture education and summer camps. The FRTEP agent will also offer special classes in conservation planning, records management, business plan development, animal husbandry and other programs as requested by the community. Though a complementary relationship with the 1994 Institution, the FRTEP program will be part of a comprehensive Extension outreach that also includes community gardens and food preservation.

MT - Blackfeet 2009-2013

Montana State University continues to be a conduit for Reservation producers to receive support from a variety of experts including Montana's agricultural research station scientists, MSU's diagnostic lab, Montana Department of Livestock and Vet Services and the state's agri-marketing specialist. The primary industry in the Reservation community is agriculture, with Reservation lands supporting 575,256 acres of grain and approximately 1,014,000 acres of grazing lands. This agricultural-focused program responds to community demands to support the Reservation's agricultural producers. It will also include 4-H youth development activities.

NV - Nevada Indian Tribes 2009-2013

The University of Nevada Cooperative Extension Service continues to serve the Washoe, Shoshone, and Paiute tribal communities with an extension program focused on agricultural education and youth leadership. This program increased the state conservation funds used by American Indian farmers and ranchers and resulted in the construction of 14 low-cost hoop houses for vegetable production at six reservation communities. Going forward two more communities will be getting hoop houses. An outreach at two elementary schools will be continued, with over 1,000 youth being served. Land leveling has resulted in irrigation for 7,000 acres at Duck Valley Reservation and 1,659 at Walker River. Increasing the number of productive acres on Reservations will continue to be a goal of the program moving forward.

NC - Cherokee 2009-2013

North Carolina State University continues extension programs on the Cherokee Reservation in western North Carolina that focus on health and food security through gardening. The outreach effort includes demonstrations projects, farm trials and interactive hands-on workshops. Other innovative ways to reach Tribal members include: a mobile classroom that travels into the mountains to provide garden information, an on-site teaching garden and a program distributes starting materials for home gardens so that more families can enhance their food security and diet.

NM - Zuni 2011-2013 (Restored 2009 program)

This New Mexico State University program provides 4-H programs in pottery, livestock, shooting sports, sewing and canning. It will address youth in crisis through programs in suicide and substance abuse prevention and anti-bullying. There will be a nutrition outreach as well. Farmers and ranchers will be able to attend beef and sheep quality assurance programs and a hands-on sheep shearing school. The gardening outreach will involve education on dry land farming, school and community gardens and a farmers' market exchange.

NM - Jicarilla 2011-2013 (Restored 2009 program)

The goal of this New Mexico State University program is to help agricultural producers, especially women farmers, on the Jicarilla Reservation. It will also provide activities for Reservation youth. The project seeks to help farmers understand new technologies that can boost production and promote the use of sustainable agricultural practices. For women producers, who are a growing segment of the farming community, this project seeks to inform them of resources that can help them succeed. The program also reaches Jicarilla youth with information about the importance of agriculture in their Tribal

history and gives them information on maintaining healthy lifestyles. Youth at risk are also mentored through this grant.

ND - Extension on the Fort Berthold Indian Reservation 2009-2013

The overarching goal for the North Dakota State University FRTEP project is to expand opportunities for tribal youth at the Fort Berthold reservation. The program will build upon its in-school enrichment programming that teaches students about agriculture, nutrition, and health. It will expand the number of Reservation youth who can participate in 4-H. NDSU Extension brought the popular "Dining with Diabetes" program to Fort Berthold in 2012, and is proud to be the first Extension office in the state to provide this program to Indian reservations. In addition, this FRTEP project provided assistance to Reservation agricultural producers through promotion of biological control agents to manage the spread of leafy spurge.

OK - Muscogee Creek 2009-2013

Oklahoma State University continues to provide the Muscogee (Creek) Nation with an extension program that focuses on youth development and serves as a liaison between the state Cooperative Extension Service and the Creek Nation. Creek families gain access to programs in agriculture, human sciences and 4-H. Youth are the focal point of the project, with science activities such as robotics, straw and pop bottle rockets. The FRTEP Extension educator impacts the lives 56,000 Creek citizens by enhancing the ability of 55 Cooperative Extension Service educators in 21 counties to better reach Native American families with educational programs.

OR - Warm Springs 2009-2013

Through this grant, Oregon State University continues to engage the tribal community in improved range management by focusing on invasive species and livestock health. To help producers achieve a higher rate of return on their land, the program will also provide agri-business education that covers local and global food supplies, crop diversification and marketing. The Agriculture in the Classroom Program at Warm Springs will continue to provide tribal youth with knowledge and skills in the area of food production and nutrition. The FRTEP program also plans an outreach to tribal teachers, especially those who provide lessons on food and culture. An Extension garden will also be used to provide youth hands-on activities.

SD - Pine Ridge 2009-2013

South Dakota State University will help the Oglala Sioux Tribe enhance agricultural productivity, revitalize communities and educate reservation youth, particularly in math and science. While the Tribe reports that the major economic operation is cattle farming, the number of American Indian ranchers is limited, with much of Tribal land leased to non-members. The FRTEP project will help American Indian ranchers to improve land usage, while supporting organizations that encourage American Indian to pursue agricultural production. The region is considered to be a food desert as there are only two grocery stores. The FRTEP agent will address the need for better access to quality produce through community gardens, working in partnership with Oglala Lakota College. The youth outreach will involve 4-H and other activities involving science and conservation.

SD - Rosebud 2009-2013

South Dakota State University uses this grant to continue youth activities, financial literacy workshops and community gardens on the Rosebud Reservation. Many stakeholders on the Rosebud Reservation lack Internet access and the FRTEP program continues to fill an information void, linking the community to knowledge and resources. The Rosebud Extension Office has recently signed a comprehensive collaborative partnership agreement with the Boys and Girls Club of Rosebud to provide curriculum and programming. Additionally, the program will promote community health by offering training in food preservation and localized agriculture, in an effort to foster community engagement and self-determination. In rancher outreach, this office will continue its efforts to educate producers and landowners about sustainable practices in livestock production and land management.

SD - Cheyenne River 2009-2013

The U.S. Census reports that 45 percent of the Reservation population is under 18, so much of the program will be youth development. Youth programming will include robotics, photography, film and environmental education. School gardens and summer youth camps will contribute to learning among the Reservation youth. The agricultural component of this project will focus on small acreage farming and increased participation in farmers' markets among American Indian growers.

WA - Colville 2009-2013

Washington State University prides itself on using USDA funding and its Extension expertise to build a working partnership over the last 20 years with the Colville Confederated Tribes. The university will continue to promote youth development through programs in agriculture, science, cultural knowledge and conservation. It will offer agricultural producers productivity enhancing programs while facilitating natural resource management. In addition, Reservation producers will be able to learn about market development in order to build a better quality of life for their families. This program fulfills a need for direct outreach in a community where 80 percent of households lack broadband Internet.

WA - Kalispel Tribe of Indians - WSU Pend Oreille County Extension 2011-2013

This Washington State program was established in 2011 with FRTEP planning funding. It will serve the Kalispel Tribe of Indians (KTI) through community gardens in an effort to address the Reservation's designation as a food desert. The Kalispel buffalo herd was established in 1978 with consultative assistance from WSU Cooperative Extension. The Tribe has requested that USDA FRTEP help develop a management plan for the herd, that will include a grazing plan, integrated weed management, pasture and hay land improvement and genetic diversification. The weed management effort will also increase the acreage available for food production.

WI - Wisconsin Bad River Reservation Extension Project 2009-2013

The program, started as a pilot project, continues to expand its educational programming on the Bad River Indian Reservation in Northwest Wisconsin. High rates of obesity and diabetes are a growing problem for children and adults in the Bad River community, as identified by health statistics. This FRTEP program educates tribal youth in growing, harvesting and preparing traditional foods as a means achieving better health while preserving cultural traditions. Importantly, youth have become engaged in many of the new activities and have expressed interest in continuing these activities.

WY - Wind River 2009-2013

The University of Wyoming continues to provide extension education programs to the Shoshone and Arapahoe Tribes of the Wind River Reservation. It provides educational programs to a wide variety of tribal members, with a particular focus on agricultural producers. It supports youth through agriculturally related programs. While there are approximately 200 agricultural producers on this reservation, there are only two range conservationists assigned to help manage the entire 2.2 million acre landmass. There is also no Tribal agricultural department. Therefore, Extension's presence is greatly needed and appreciated by Wind River residents.

IR-4 Grants

Mr. Aderholt: Please provide a chart showing all IR-4 grants, including the amount, recipient(s) and purpose for fiscal years 2009 through 2013.

Response: The information is provided for the record.

[The information follows:]

Purpose: The IR-4 headquarters coordinates activities nationally and internationally with other agencies and organizations including the U.S. Environmental Protection Agency, USDA Agricultural Research Service, USDA Animal Plant Health Inspection Service, USDA Foreign Agricultural Service, Canada's Pest Management Centre of Agriculture, Agri-Food Canada, and the crop protection industry. Projects are evaluated by state and federal scientists, commodity group representatives, growers and other experts. Headquarters staff manages pesticide registration protocols and prepares petitions for submission to the U.S. Environmental Protection Agency. The IR-4 regional centers identify field, laboratory, and quality assurance experts to generate data needed for pesticide registrations. Regional centers analyze residue samples from field trials as well as from other sources.

Fiscal Year	Recipient	Amount
2009	IR-4 Headquarters, Rutgers University	\$2,919,826
	NC Region, Michigan State University	\$1,723,015
	NE Region, Cornell University	\$1,568,307
	Southern Region, University of Florida	\$2,056,274
	Western Region, University of California	\$2,919,338
2010	IR-4 Headquarters, Rutgers University	\$3,382,853
	NC Region, Michigan State University	\$1,943,070
	NE Region, Cornell University	\$1,068,689
	Southern Region, University of Florida	\$1,967,317
	Western Region, University of California	\$2,972,923
2011	IR-4 Headquarters, Rutgers University	\$3,364,921
	NC Region, Michigan State University	\$1,857,430
	NE Region, Cornell University	\$945,840
	Southern Region, University of Florida	\$2,124,400
	Western Region, University of California	\$3,019,460
2012	IR-4 Headquarters, Rutgers University	\$2,948,618
	NC Region, Michigan State University	\$1,891,412
	NE Region, Cornell University	\$939,745
	Southern Region, University of Florida	\$2,245,095
	Western Region, University of California	\$3,048,635
2013	IR-4 Headquarters, Rutgers University	\$2,328,934
	NC Region, Michigan State University	\$1,940,173
	NE Region, Cornell University	\$946,604
	Southern Region, University of Florida	\$2,074,457
	Western Region, University of California	\$2,935,826

Food and Agriculture Defense Initiative

Mr. Aderholt: Please provide a chart showing all Food and Agriculture Defense Initiative grants, including the amount, recipient(s) and purpose for fiscal years 2009 through 2013.

Response: The Food and Agriculture Defense Initiative supports integrated activities (research, education, and/or extension) in support of national networks that provide for the defense of American agriculture. The details for FY 2009 through FY 2013 are provided for the record:

[The information follows:]

Institution Name	FY 2009 Award Amount (\$)	FY 2010 Award Amount (\$)	FY 2011 Award Amount (\$)	FY 2012 Award Amount (\$)	FY 2013 Award Amount (\$)	Purpose or Title
University of Arizona	298,000	298,000	182,000	182,000	166,000	National Animal Health Laboratory Network: Arizona
University of California	830,350	853,182	500,000	500,000	452,400	Western Regional Center in the National Plant Diagnostic Network
University of California	308,000	298,000	182,000	182,000	166,000	National Animal Health Laboratory Network: California
Colorado State University	298,000	298,000	182,000	182,000	166,000	National Animal Health Laboratory Network: Colorado
Florida Department of Agriculture	298,000	298,000	182,000	182,000	166,000	Homeland Security - Agriculture
University of Florida	830,350	975,899	500,000	500,000	452,400	The Southern Plant Diagnostic Network
University of Georgia	298,000	298,000	182,000	182,000	166,000	Georgia National Animal Health Laboratory Network Program
Iowa State University	298,000	298,000	182,000	182,000	166,000	National Animal Health Laboratory Network Activities for Iowa State University
Purdue University	248,250	250,000	175,000	175,000	175,000	National Plant Database Network National Database/National Network Diagnostic Center

Institution Name	FY 2009 Award Amount (\$)	FY 2010 Award Amount (\$)	FY 2011 Award Amount (\$)	FY 2012 Award Amount (\$)	FY 2013 Award Amount (\$)	Purpose or Title
Purdue University	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network for the Food and Agriculture Defense Initiative
Purdue University	485,000	499,000	304,575	305,000	284,030	Extension Disaster Education Network Homeland Security Initiative: Strengthening EDEN's Role in Homeland Security, Food and Ag Defense, and All-Hazard Education
Kansas State University	830,350	853,182	500,000	500,000	452,400	Grant Plains Diagnostic Network
Kansas State University	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network: Kansas
Murray State University	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network: Kentucky
Louisiana State University	298,000	298,000	182,000	182,000	166,000	National Animal Health Laboratory Network: Louisiana
Michigan State University	830,350	965,962	575,425	575,940	520,400	North Central Plant Diagnostic Network
Michigan State University	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network: Michigan
University of Minnesota	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network: Minnesota

Institution Name	FY 2009 Award Amount (\$)	FY 2010 Award Amount (\$)	FY 2011 Award Amount (\$)	FY 2012 Award Amount (\$)	FY 2013 Award Amount (\$)	Purpose or Title
Mississippi State University	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network: Mississippi
North Carolina Department of Agriculture and Consumer Services	298,000	298,000	182,000	182,000	166,000	National Animal Health Laboratory Network: North Carolina
University of Nebraska	50,000	50,000	31,000	31,000	30,000	Further Integration of the Nebraska Veterinary Diagnostic Center into the National Animal Health Laboratory Network
New Jersey Department of Agriculture	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network
New Mexico State University	50,000	50,000	31,000	31,000	30,000	New Mexico Agriculture Livestock Incident Response Team Training Program to Enhance Staff Training for Foreign and Emerging Animal Diseases
Cornell University	298,000	298,000	182,000	182,000	166,000	National Animal Health Laboratory Network: New York
Cornell University	980,350	1,079,969	500,000	500,000	487,400	Northeast Plant Diagnostic Network
The Ohio Department of Agriculture	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network supplemental agreement for IT and equipment support

Institution Name	FY 2009 Award Amount (\$)	FY 2010 Award Amount (\$)	FY 2011 Award Amount (\$)	FY 2012 Award Amount (\$)	FY 2013 Award Amount (\$)	Purpose or Title
Oregon State University	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network: Oregon
Pennsylvania Department of Agriculture	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network: Pennsylvania
South Dakota State University	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network: South Dakota
State of Tennessee Department of Agriculture	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network: Tennessee
Texas AgriLife Research	298,000	298,000	182,000	182,000	166,000	National Animal Health Laboratory Network for the Food and Agriculture Defense Initiative
Utah State University	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network: Utah
Washington State University	308,000	308,000	182,000	182,000	166,000	Washington Animal Disease Diagnostic Laboratory Participation as a Core Laboratory in the National Animal Health Laboratory Network
University of Wisconsin	298,000	298,000	182,000	182,000	166,000	National Animal Health Laboratory Network
University of Wyoming	50,000	50,000	31,000	31,000	30,000	National Animal Health Laboratory Network Testing University of Wyoming, Wyoming State Veterinary Laboratory
TOTAL	9,431,000	9,863,194	5,735,000	5,735,940	5,296,030	

STEM Grants

Mr. Aderholt: Please provide a summary of STEM grants, including the program and amount for fiscal years 2009 through 2013.

Response: The information is submitted for the record.

[The information follows:]

Science, Technology, Engineering and Mathematics (STEM)
Funding for Fiscal Years 2009 through 2013

<u>Program</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>
Secondary and Two-Year Post Secondary Higher Education	\$983,000	\$983,000	\$981,034	\$900,000	\$832,378
Competitive Challenge Grants	5,654,000	5,654,000	5,642,692	4,770,000	a/
Multicultural Scholars	981,000	1,241,000	1,238,518	990,000	a/
National Needs Graduate Fellowship Program	3,859,000	3,859,000	3,851,282	3,240,000	a/
Institution Challenge, Multicultural Scholars, and Graduate Fellowships	0	0	0	0	8,323,780
Agriculture in the Classroom	553,000	553,000	551,894	552,000	509,322
Women and Minorities in STEM Fields	<u>0</u>	<u>400,000</u>	<u>399,200</u>	<u>400,000</u>	<u>369,074</u>
TOTAL STEM GRANTS	12,030,000	12,690,000	12,664,620	10,852,000	10,034,554

a/ Higher Education Challenge Grants, Multicultural Scholars, and National Needs Graduate Fellowship Program are consolidated in FY 2013.

Plans of Work

Mr. Aderholt: Please describe the plan of work requirements for the 1862, 1890 and 1994 institutions.

Response: The plan of work requirements for the 1862 and 1890 institutions are that each eligible institution submits an initial 5-year plan of work and an update each year thereafter. Eligible institutions are defined as those receiving Federal agricultural research and extension formula funds under the Hatch Act of 1887, as amended (7 U.S.C.361a et seq.); sections 3(b)(1) and (c) of the Smith-Lever Act of 1914, as amended (7 U.S.C. 343 (b)(1) and (c));and sections 1444 and 1445 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977, as amended (7 U.S.C. 3221 and 3222). The 1994 institutions are not subject to plan of work requirements. Both the initial plans of work and annual updates are required to include descriptions of specific elements. Those elements are: merit review process, multistate and integrated activities, stakeholder input process, and planned programs. Each planned program included in a plan of

work must be described according to a logic model containing the following elements: situation and scope, assumptions and goals, activities, outputs, and outcomes.

Criteria to Evaluate Work Plans

Mr. Aderholt: Please describe the process and criteria the agency uses to evaluate the plans.

Response: The process NIFA uses to evaluate plans of work consists of assigning National Program Leaders (NPLs), the subject matter experts in agricultural research and extension, to specific states, territories, and insular areas and plans of work within those states to review the initial plan(s) of work and annual updates. NPLs have 60 days from date of receipt by the agency to perform a review of their assigned plan(s) of work and are required to acknowledge that certain elements included in the plan of work are acceptable and meet agency standards. The criteria for these elements are broken down into four sections—overview, merit, stakeholder input, and Multistate and Integrated activities. In the plan overview section, the NPL determines whether an appropriate amount of person-time is available and planned for achieving the stated objectives of the programming. In the merit review section, the NPL must determine that at least one effective merit review process was identified.

In the stakeholder input section, the NPL evaluates the appropriateness of the actions and methods taken to seek stakeholder input that encourages their participation. The NPL also checks for an adequate description of how the stakeholder input will be considered in future programming. In the Multistate and Integrated activities section, the NPL ensures that the following descriptions are adequate: how the planned programs address the critical issues of strategic importance, including those identified by the stakeholders; how the planned programs address the needs of under-served and under-represented populations of the State(s); how the planned programs describe the expected outcomes and impacts; and how the planned programs result in improved program effectiveness and/or efficiency. In the planned program section the NPL must decide whether appropriate logic model elements are included and, in addition, if the knowledge areas, outputs, and outcomes are appropriate for the stated objectives of the program. Additionally, NPLs are expected to make general comments and suggestions for how institutions can strengthen research and/or extension programming at their institutions.

Work Plan Standards

Mr. Aderholt: How often does the agency reject plans of work because they do not meet agency standards? When was the last time this occurred?

Response: NIFA does not often reject plans of work because they do not meet agency standards. However, if a National Program Leader (NPL) deems a plan of work is in need of improvement, he or she can send the plan of work back to the institution for editing. When initiating this process, NPLs must include specific instructions and detailed guidance on what particular elements need improvement and how that improvement can be achieved. This editing and improvement process occurs with approximately two plans of work annually. The last time this occurred was in FY 2012.

Mr. Aderholt: If a plan is insufficient how does the agency work with the institution that submitted the plan of work to improve it?

Response: The review of plans of work is collegial in nature, and the responsibility of the National Program Leader (NPL) assigned to review a plan of work is to identify areas where institutions could strengthen their programming or revise their logic model to contain new or different elements that will improve eventual outcomes and impacts. If an NPL identifies a section of a plan of work that needs improvement, that NPL initiates a conversation with the Director(s) of the institution; this conversation often occurs through a combination of phone and email, but it can also occur through on-site visits by the NPL to the institution. Because the submission and review of plans of work is facilitated by electronic software, documents are easily able to be passed back and forth between NIFA and the institution until a mutually agreeable solution is met and which satisfies agency standards.

Mr. Aderholt: Do institutions follow the plans of work approved by the agency?

Response: Institutions do follow the plans of work approved by NIFA. Their ability to submit an annual update allows them to amend the plan of work to reflect issues that are present or expected in their local, state, and regional communities. This enables institutions to follow a plan that is timely with current and emerging agricultural research and extension issues.

Mr. Aderholt: Are the plans of work useful tools for evaluating an institution's performance in meeting research objectives?

Response: NIFA believes the plans of work are useful tools for evaluating an institution's performance in meeting research objectives. A plan of work is built around a program logic model which requires institutions to identify their assumptions about their program. This is validated with research and experience. Assumptions underlie and influence the program decisions that are made. Assumptions are principles, beliefs, ideas about the problem or situation, the resources and staff, the way the program will operate, what the program expects to achieve, the knowledge base, the external and internal environment, and the participants and how they learn, their behavior, and their motivations. It is important to note, however, that while plans of work are useful tools for establishing what a program's objective is based on such assumptions, the majority of data NIFA receives that describes an institution's actual performance in meeting those objectives is included as part of the Annual Report of Accomplishment and Results. This report is submitted annually and is directly tied to the plan of work of the same fiscal year. So, while the plan of work establishes the baseline of what the institution plans to accomplish, the annual report describes what it actually accomplished.

Recommendations for Work Plans

Mr. Aderholt: Please describe any recommendations for improving the plans and/or the process for reviewing them.

Response: A recommendation NIFA has for improving the plans of work and their associated annual reports of accomplishments and results is to streamline and simplify the user interface of the electronic software used for the data collection. NIFA is continually asked to report on evidence of past accomplishments as a result of capacity-building funds. It is imperative that the software used to collect such programming accomplishments (both expected and actual) guides institutions in entering both quantitative and qualitative data in a way that is useful and retrievable for NIFA so that the agency can quickly identify agricultural research and extension program activities and accomplishments as needed by a variety of parameters and in a way that is easily understandable to multiple audiences. NIFA has no recommendations for improving the process for reviewing the plans of work, as the agency believes the right subject matter experts are already involved in the review process and are adept at ensuring that plans of work meet requirements and agency standards.

1890 Funding

Mr. Aderholt: Please describe how formula funding for each 1890 institution will change beginning in fiscal year 2016.

Response: In 2016, Central State University will become eligible to receive formula funding designated exclusively for 1890 institutions. Based on 2014 funding levels and 2000 census data, below are the anticipated changes in funding for the 1890 institutions beginning in 2016.

Evans-Allen Research (Sec 1445) -- Beginning in 2016, Central State University (CSU) will receive approximately \$435,031. Including CSU in Evans-Allen Capacity funding will result in an average decrease for the other eighteen 1890 institutions of 0.84 percent or \$24,168 per institution. Excluding CSU, each institution will receive an average of \$2,744,094. Including CSU, if no additional funding is appropriated, each institution will receive an average of \$2,599,668.

1890 Extension (Sec 1444) -- Beginning in 2016, Central State University will receive approximately \$381,751. Including CSU in 1890 Extension Capacity funding will result in an average decrease for the other eighteen 1890 institutions of 0.87 percent or \$21,208 per institution. Excluding CSU, each institution will receive an average of \$2,342,400. Including CSU, if no additional funding is appropriated, each institution will receive an average of \$2,219,116.

Renewable Resources Extension Act (RREA) -- RREA funding is not limited to 1890 institutions. In 2014, 71 universities received RREA allocations. Beginning in 2016, Central State University will receive approximately \$13,500. Including CSU in RREA Capacity funding will result in an average decrease for the other institutions (including the 1890s) of 0.08 percent or \$190 per institution. Excluding CSU, each institution will receive an average of \$50,670. Including CSU, if no additional funding is appropriated, each institution will receive an average of \$49,967.

Expanded Food and Nutrition Education Program (EFNEP) -- The calculation of EFNEP funding includes all 1890 and 1862 institutions. Additionally, the funding distribution to the 1890s includes multiple factors such as the population in each State living at or below the poverty level. Therefore, at this time we are not able to determine the exact funding change to each institution resulting from the addition of a new 1890 institution (Central State University).

CONGRESSMAN KEVIN YODER

Wheat Scab - Fusarium

Mr. Yoder: Fusarium is a significant threat to cereal crops. In addition to the ongoing work under the U.S. Wheat and Barley Scab Initiative, there has been ongoing risk mitigation research with this pest in various grains that has been eliminated from the USDA budget request under National Program 108 - Food Safety - Control of Toxic Endophytic Fungi.

Isn't this cut ill-conceived in view of the greater scrutiny mycotoxins and corresponding risk mitigation measures are receiving internationally in Codex Alimentarius and especially since the USDA and FDA are negotiating with our European partners to potentially low Codex standards for a variety of mycotoxins produced by these organisms in grains?

Response: ARS has devoted considerable time and effort to assessing the long-term benefits of the current research and is proposing termination of this research effort in fiscal year 2015, but will continue to support higher priority mycotoxin objectives at the same location. The research proposed for termination addresses the use of endophytic bacteria (*Bacillus*) as a biological control agent to control Fusarium contamination in grains such as corn. The concept behind the research is interesting; however it has not shown any outcome or impact, especially when compared to the work at our Maricopa, Arizona, laboratory with the use of non-toxigenic strains as biological control agents for *Aspergillus*, which out compete the toxigenic strains. This competitive form of biological control is now accepted by industry, is used in the United States and in over 12 countries in Africa for various grains, tree nuts, and ground nuts. Competitive biological control research conducted by the Maricopa laboratory is also funded by USAID and the Gates Foundation. While there is a FY 2015 proposed reduction at Athens, Georgia, ARS has invested approximately \$2 million in additional funding in fiscal year 2014 to address high priority food safety objectives relative to mycotoxins.

Research Funding for Wheat Scab - Fusarium

Mr. Yoder: How will this cut affect the overall Fusarium research initiative within USDA, specifically USDA's Agricultural Research Service's Toxicology and Mycotoxin Research Unit, and ultimately efforts to control the disease if new global standards come into existence for mycotoxins?

Response: Although some funding is proposed for termination, higher priority mycotoxin objectives will continue to be supported at the same location. Ongoing research efforts will continue to examine the effect of Fusarium toxins on humans, through various animal model studies and human samples, and are supported in part by the National Institutes of Health (NIH) and international collaborations. The effect of Fusarium toxins is to elicit neural tube defects, among other effects on organ tissues, after the consumption of contaminated corn products. This is a severe problem among the Hispanic populations of Central America and the United States. The research examines for human biomarkers of intoxication which then allows subsequent medical intervention. Research data produced by these studies is also used by international public health agencies for their risk assessments.

T-CAP

Mr. Yoder: The Triticeae {meaning Wheat, Barley and Triticale} Coordinated Agricultural Project, or T-CAP, is entering its fourth year and is funded by an Agricultural and Food Research Initiative (AFRI) grant of \$25 million over five years. This project is applying some of the latest genomic technology to barley and wheat development, and helping to improve traits in wheat and barley associated with nitrogen and water-use efficiency. T-CAP funding expires February 1, 2016, but continuation of the long-term collaborative projects between the wheat and barley research communities will continue to be essential to harvest the benefits of the T-CAP research. Looking beyond FY15, what opportunities exist within NIFA to continue building on this success?

Response: NIFA agrees that this has been a highly successful project. However, we do not envision being able to fund such large projects in the near future because of limited funding and continuing commitments. Individual investigators can look to the Plant Breeding for Agricultural Production priority area in the AFRI Foundational Program for smaller grants (\$500,000 or less). The 2015 and 2016 Food Security and Climate Change Challenge area RFAs have not been developed yet. They may provide opportunities for continued work in this area, but probably for smaller amounts, depending on the total funding available in AFRI. There may also be opportunities in the new Water Challenge area for the work on drought resistance.

CONGRESSWOMAN ROSA L. DELAURO

Foundation for Food and Agriculture Research

Ms. DeLauro: First, Dr. Woteki, what is the USDA vision for the Foundation for Food and Agriculture Research (FFAR), which was recently authorized in the Farm Bill? Why is a Foundation for Food and Agricultural Research needed in addition to USDA's existing agricultural research activities - how will it make a difference? I understand this Foundation will involve public-private partnership. How will the agency avoid conflicts of interest in structuring the Foundation, reviewing the research proposed, and when selecting what is conducted.

Response: USDA is carefully working to implement the statutory authority that has created the Foundation for Food and Agriculture (FFAR). Congress chose to create an independently incorporated Foundation with links to USDA that, we hope, will permit cooperative and non-duplicative research on food and agricultural topics. The five ex officio non-voting members of the Board are the Secretary of Agriculture, the Under Secretary for Research, Education and Economics (REE), the Director of the National Science Foundation (NSF), the Administrator of the Agricultural Research Service (ARS) and the Director of the National Institute for Food and Agriculture (NIFA.) The initial board of voting directors will be appointed by the Ex Officio Members from a list of nominees provided by the National Academy of Sciences (NAS) - eight (8) members of the board, and from lists nominated by "industry" - seven (7) members of the board.

We believe the Foundation will facilitate cooperative research between the private and public sectors, may cover topics that cannot or will not be undertaken by federal research entities, and the Foundation can fund activities such as Symposia and other educational activities that can elucidate key issues for research but that are not funded by the Congressional appropriations. In addition research of key interest to the private sector may be undertaken quickly and efficiently in cooperation with USDA, other governmental organizations and with academia and other entities in the private sector.

Because the statute established the Foundation as an independent corporation operating outside of USDA and the Ex Officio members of the Board do not have a vote on funding projects we do not believe there will be conflicts of interest in reviewing the research proposed and selected. We do hope that the statements in the statute that advise the Foundation Board to consult with the Secretary about topics for research to be undertaken will help to avoid duplicative projects and will establish the lanes for research that will be undertaken by REE agencies and the Foundation.

NIFA Competitive Grants

Ms. DeLauro. Secondly, Dr. Ramaswamy, would you tell us what the National Institute for Food and Agricultural Research (NIFA) is doing to make NIFA competitive grant information more easily accessible to stakeholders? Furthermore, I would like to know what NIFA is doing to improve transparency. Information such as which investigators and institutions have been funded, at what level, for how long, and what topics are being researched should be more readily available to help track the

success of NIFA grants and monitor the USDA's competitive grants activity, just as you are able to do for agencies such as NIH. Can you tell us what actions you are taking to make this information more readily available to the public?

Response: NIFA has included the Research, Education, and Economics Information System (REEIS) in Data.gov. REEIS is accessible to the public and is a source of information on the research, education and extension programs, projects and activities of the ARS, ERS, NIFA, NASS, and NIFA partner institutions. Moreover, NIFA grant information in REEIS is now downloadable by the public and includes which investigators and institutions have been funded, at what level, for how long, and the titles of the research projects. NIFA is reviewing the Open Data requirements and holding regular meetings to develop NIFA policies. NIFA is initiating a Data Inventory to identify available data and determine what should be made public. Finally, with guidance from the White House Office of Science and Technology Policy, USDA-wide implementation plans for Public Access to Scholarly Publications and Scientific Digital Data are currently under development.

Food Safety

Ms. DeLauro: Next, I would like to hear about what USDA doing in the area of food safety research. Can you tell us about your efforts in this area and also, tell us about any coordinated effort of food safety research you are undertaking with CDC and FDA?

Response: In the area of food safety research, NIFA is supporting competitive grants that focus on improving the safety of fresh and fresh-cut fruits and vegetables, understanding antimicrobial resistance in food production systems, supporting research that reduces total fat and saturated fats in foods, and improving the nutritional quality of foods and food ingredients without sacrificing flavor, acceptability, and safety.

NIFA is also working very closely with FDA on providing training and technical assistance for the Food Safety Modernization Act. NIFA expects the first request for applications to be made by October 2014.

The mission of the ARS Food Safety Research Program is to provide the means to ensure that the food supply is safe and secure for consumers and that food and feed meet foreign and domestic regulatory requirements. Food safety research seeks ways to assess, control or eliminate potentially harmful food contaminants, including both introduced and naturally occurring pathogenic bacteria, viruses and parasites, toxins and non-biological-based chemical contaminants, mycotoxins and plant toxins. Food safety is a global issue; thus the research program involves both national and international collaborations through formal and informal partnerships. Accomplishments and outcomes are utilized in national and international strategies delivering research results to regulatory agencies, commodity organizations, industry and consumers.

The ARS Food Safety Program is divided into six research areas: Population Systems; Systems Biology; Technologies for the Detection and Characterization of Contaminants; Intervention and Control Strategies; Predictive Microbiology and Data Acquisition; and Chemical and Biological Contaminants: Detection Methodology, Toxicology and Toxinology. Each of these research areas has detailed aims, for example, the Toxicology/Toxinology

section conducts research that impacts the regulation and control of veterinary drugs, residues, heavy metals, persistent organic pollutants, and biological toxins derived from bacteria, fungi and plants. Program details can be found in the Action Plan at <http://www.ars.usda.gov/SP2UserFiles/Program/108/2011-2015ActionPlanforweb.pdf>. ARS research accomplishments and their impact are available in an annual report provided to other Federal agencies.

Regarding coordinated efforts, specific examples are described below. ARS has worked closely with CDC and FDA on many aspects of food safety. Specifically, with the CDC and FDA, ARS conducted the culturing for the National Antimicrobial Resistance Monitoring System (NARMS) and is still actively engaged in assisting FSIS in interpreting data associated with NARMS. ARS is now leading a pilot project funded by FDA that follows production animals from farm to slaughter, comparing the genetic makeup of foodborne pathogens to determine where and if antimicrobial resistance occurs and at what stage should animals be tested for surveillance purposes. In addition, ARS is an active member of numerous NARMS working groups and committees as well as a member of the Interagency Task Force on Antibiotic Resistance (ITFAR). Together, the agencies work to develop strategies to better address concerns of antimicrobial resistance in both public and animal health.

ARS has worked collaboratively with the FDA for the past 2 years on determining the prevalence, levels, and types of *Listeria monocytogenes* in 15 categories of FDA-regulated ready-to-eat (RTE) foods. To determine the prevalence, etc., food samples were purchased from retail establishments within FoodNet sites in Georgia, Connecticut, California, and Maryland. This is a critically important study since the goal was to determine whether the interventions that were implemented to control the *Listeria* pathogen were having any impact. Results from the study strongly indicate that the interventions implemented are working. The study is near completion and the outcome data will be used to completely revise the 2003 Federal Interagency Risk Assessment on Ready-to-Eat Foods, which will ultimately impact public health through improved Federal regulations.

ARS works collaboratively with the FDA to develop and evaluate the protocols for destroying microbial hazards during the production of soil amendments that are used in the production of fresh produce in various locations in the United States. This research was a directed request to ARS to address issues under the new Produce Rule within the FDA-Food Safety Modernization Act (FSMA). The outcome and impact of this research will provide guidelines that producers of fresh produce can use. Specifically, due to climate conditions, the methods for production of soil amendments in the North East will be different from those in the South West, or in California.

ARS works collaboratively with the FDA to develop and evaluate the protocols and regulations for providing water for the production of fresh produce in order to implement the Produce Rule under FSMA. Specifically, the presence of pathogenic microorganisms in irrigation waters is considered to be a potentially important factor in the preharvest contamination of fresh produce. Many of the essential pathogen fate and transport processes associated with irrigation are currently not well understood or modeled. ARS studies focused on: (a) elucidating and quantifying mechanisms and factors controlling pathogen and indicator bacteria fate and transport from animal sources to irrigation water sources and via irrigation water delivery systems; and (b) developing models and computer-based tools to recommend and

implement site-specific diagnostics, monitoring, and prediction of the fate and transport of pathogen and indicator bacteria in irrigation water sources and via delivery systems.

The Economic Research Service (ERS) conducts research in a number of food safety topics, including the expected impacts of new food safety legislation on the farm and food sector; consumer response to food safety outbreaks; measurement of consumer benefits from food safety policy; the costs and benefits of mandatory food safety programs implemented by produce grower organizations; the economic trade-offs for reducing sub-therapeutic antibiotic use in farm animals; and inter-agency collaborations to better understand and prioritize food safety risks and interventions.

ERS, the FDA, and the CDC have a number of collaborative efforts underway on the economics of food safety. These include the following:

- USDA and FDA jointly organized a workshop in summer of 2013 on economic research needs related to FSMA. This meeting was held in conjunction with the annual meeting of the Agricultural and Applied Economics Association (AAEA) in order to gain insights from leading economists working on food safety in academic settings, government and industry. ERS and FDA are discussing possible FDA funding of research and data collection by ERS to provide a better understanding of the impact of FSMA. Another organized symposium at the 2014 AAEA meetings this summer will look at the highly integrated U.S.-Latin American product industry and impacts of the FSMA on these countries.
- ERS is participating in a joint USDA/FDA working group addressing issues raised by implementation of the FSMA. FDA is re-proposing a number of rules implementing the FSMA, and ERS is providing economic analysis and technical guidance on economic issues in a number of areas, including provisions affecting mixed-use facilities, water use, manure handling, and preventive controls.
- ERS is collaborating with CDC to estimate relationships between consumer food purchases, consumption, and food borne illness. Researchers are assessing the feasibility of using available time series data on consumer food purchases (ERS) and on disease surveillance (CDC) to statistically estimate these relationships. This project is conducted under the FoodNet Attribution Steering Group.
- Scientists from CDC, USDA's Food Safety and Inspection Service (FSIS) and ERS are collaborating with the World Health Organization (WHO) effort to provide globally consistent estimates of foodborne disease burden for each WHO region. This effort will provide both estimates of the incidence of disease and attribution of disease to food sources. This is the first time such estimates will be available and will provide a better understanding of foodborne health hazards around the world.
- ERS economists are collaborating on food safety research with CDC, FDA and FSIS through the Interagency Food Safety Analytics Collaboration. The goal of these projects is to improve methods available to attribute foodborne illnesses to consumption of specific foods. ERS has brought expertise and data on food consumption to this effort.

ERS is an active participant in the Interagency Risk Assessment Consortium (IRAC). IRAC meets quarterly and provides a forum for discussion of research needs, data availability and scientific advances among federal agency scientists and economists working on foodborne hazards. IRAC also conducts collaborative projects to foster collaboration and communication on research relevant to food safety risk assessment in the federal government. For example, ERS collaborated on one such project, a series of seminars on research on estimating the relationship between food exposures and foodborne disease at CDC, FDA, FSIS and ERS. This was followed by a workshop exploring better ways to integrate work being developed in risk assessment and epidemiology.

Antimicrobial Resistance Innovation Institute

Ms. DeLauro: In addition, the President's budget includes \$75 million for six public-private innovation institutes (\$25 million each). One of the institutes is to study anti-microbial resistance, on an area of particular interest to me. I think you know the drug and cattle industries have been reluctant to reduce the use of antibiotics and tend to down play links between their use in animals and human illnesses. The budget says this institute will engage industry and leverage funding to generate evidence-based data for mitigating anti-microbial resistance.

Don't we know that we can mitigate this problem by stopping the use of valuable antibiotics as growth promoters and for other non-therapeutic purposes?

Response: Antimicrobials are used to enhance the health and well-being of animals and humans. Some in the scientific community have identified animal production as the single largest contributor to the rise of antimicrobial resistance (AMR) which subsequently impacts human health and well-being. Although AMR can stem from the use of antimicrobials targeting disease control and or suppression in humans, and in the food and agricultural domain, there are also naturally occurring factors unrelated to the use of antimicrobials in animals and humans. Microbes, including bacteria, when exposed to stressors elaborate self-protective mechanisms. Resistance is one of those protective traits; and is not solely the result of antimicrobial use. The food and agricultural domain must take a broad systems approach, from production to consumption, in order to mitigate antimicrobial resistance. This systems approach must transcend disciplines and expertise in order to forge a multi-pronged public-private partnership, if we are to successfully mitigate AMR and the public health threat.

Ms. DeLauro: Would you describe the mix of funding you anticipate will support the institute and who the researchers will be?

Response: The proposed Antimicrobial Resistance Innovation Institute will coordinate research efforts amongst government agencies such as the Food and Drug Administration, Food Safety and Inspection Service, Agricultural Research Service and National Institute of Food and Agriculture, universities, and the private sector. Private sector support will be expected to equally match federal support.

Ms. DeLauro: What are the safeguards in the program's design that will ensure the industry partners don't introduce bias into the findings?

Response: NIFA's built in infrastructure for grants management through its stakeholder input-driven request for applications and peer review systems eliminate the potential for biases and conflicts of interest in the selection process. Strictly enforced measures are employed in maintaining confidentiality and avoiding conflicts of interest. For example, individuals involved in the granting process do not participate in any aspect of proposal evaluation if they have served as an adviser or advisee to the applicant, collaborated with the applicant within the past 3 years, currently affiliated with or previously employed within the past 12 months by or being considered for employment by an institution seeking funds. National Program Leaders, Panelists, and Panel Managers are all held to the same standards of confidentiality and adherence to agency policies regarding conflicts of interest.

Ms. DeLauro: How will the agency avoid conflicts of interest in structuring the institute and in determining which research will be conducted?

Response: NIFA's process is consistent with those of other federal granting agencies and organizations across the U.S. NIFA will use its knowledge and experiences to build the Innovation Institute through publicly announced and open round tables for solicitation of stakeholder input, announcements in the Federal Register, development of request for applications, and peer review of all applications. Each step of the entire process, from establishing the Innovation Institute for Antimicrobial Resistance to funding and managing awarded projects will be guided by all applicable rules, regulations and legally binding mandated authorizations.

Investment in Agricultural Research

Ms. Delauro: Lastly, I understand that China spends about \$4 billion annually on agricultural research, while the \$2.7 billion USDA food and agricultural research, education, and extension budget is less than two percent of USDA's total budget. What is USDA doing to keep up with the investments and advances other countries are making in agricultural research when limited funds are available? What new projects and emerging issues does USDA plan to support in FY 2015 that might make an impact?

Response: It is correct that the U.S. is no longer the world leader in public funding of agricultural science. Since 2009, China's spending on agricultural research has exceeded that of the United States. Brazil and India have also significantly increased their spending on agricultural research in recent years while the U.S. investment has lagged. Partly as a result, U.S. agricultural productivity is now growing more slowly than that of both China and Brazil. Without continued robust public investments in science, it is likely that private investments will also taper off in the future as fewer technology opportunities emerge for private commercial development. This could undermine U.S. global competitiveness in agriculture, especially as other countries strengthen their research investments.

Public investments in science and technology create new opportunities for private research to result in new products and processes for economic growth. If the U.S. is to be successful in keeping up with the advances of other countries, we must fully leverage private investment through the

creation of robust public-private partnerships. The President's FY 2015 budget contains proposals for a number of new investments that if enacted will begin to close the gap in research investment in this country. Many of these proposals accomplish this by fostering partnerships and leveraging Federal funds with additional funding from the private sector.

Additionally, the Foundation for Food and Agricultural Research provides USDA with an effective tool for teaming with the private sector, part of an administration-wide focus to identify private-sector partners to leverage Federal funds and increase technology development efforts. Empirical evidence suggests that public food and agriculture research complements, rather than competes with, private research. USDA research agencies continue to develop new strategies for partnering with private firms through their technology transfer policies. These policies are designed to facilitate technology transfer from public laboratories to private firms, decrease private costs of product development and commercialization, and stimulate more private investment in research and development.

CONGRESSMAN SANFORD D. BISHOP, JR

Public-Private Partnerships

Mr. Bishop: I applaud your efforts to forge public-private research partnerships to leverage Federal funds and increase technology development efforts. How will you ensure that privately funded research projects will be fair, objective, and unbiased? Will USDA receive royalties from private entities that develop and market products and processes that were initially developed by ARS?

How will you ensure that privately funded research projects will be fair, objective, and unbiased?

Response: USDA has strict rules about subjecting its projects to competition when it grants federal money to any outside partner. These rules will be applied to the Innovation Institutes activities, and where necessary there will be peer reviewed work in the selection process. There are also provisions to identify conflicts of interest among applicants whether separate or joint and those procedures will also be followed.

Mr. Bishop: Will USDA receive royalties from private entities that develop and market products and processes that were initially developed by ARS?

Response: ARS intellectual property developed from federal funding will be protected in all public-private partnerships including any involving the Innovation Institutes or the new independent Foundation for Food and Agriculture Research (FFAR). ARS can receive royalties from its inventions as it normally does.

ARS continues and will be able to expand its work with the private sector to move developing research discoveries to the private sector and to commercialization where appropriate.

Food Safety Outreach Program

Mr. Bishop: You are requesting \$2.5 million to establish a program to provide food safety training, and outreach to owners and operators of small farms, food processors, and fruit and vegetable vendors affected by the Food Safety Modernization Act (FSMA) of 2011 which is administered by the Food and Drug Administration (FDA) as the lead agency. How much is FDA contributing to this training program in terms of funding and resources?

Response: In FY 2015, NIFA will work in close collaboration with FDA to establish the Food Safety Outreach Program. However, NIFA does not anticipate funding support from FDA.

ARS Southeast Poultry Research Laboratory

Mr. Bishop: Last year, the Department proposed to invest \$155 million in the new Southeast Poultry Research Laboratory (SEPRL) in Athens, Georgia, which, as I understand it, was the Department's number one priority for the Agency last year. As you may know, I am the Co-Chair of the Congressional Chicken Caucus. Georgia is the number one producer and exporter of poultry

products in the nation. The chicken industry as a whole, is a dynamic and integral part of our national economy. According to a recent study by the National Chicken Council and the U.S. Poultry and Egg Association, the poultry industry directly and indirectly provides 1,010,250 jobs, \$47 billion in wages, \$197.5 billion in economic activity and \$17.2 billion in government revenue.

The construction of a new SEPRL is critical because this laboratory provides solutions to national and international exotic, emerging and endemic poultry disease problems that impact poultry as well as human health.

This year, the SEPRL was in the "Opportunity, Growth, and Security (OGS) Initiative, for which a total of \$197 million is requested, and would include five other projects, in addition to the new SEPRL. What is the current status of the SEPRL and how much was obligated for the project for the current FY14 fiscal year?

Response: The Southeast Poultry Research Laboratory (SEPRL) in Athens, Georgia, remains the number one priority ARS facility for replacement/modernization as reported in the *USDA Agricultural Research Service Capital Investment Strategy*, which was presented to Congress in April 2012. The majority of the buildings on the SEPRL campus were originally constructed in the early 1960's and the current facility lacks adequate high containment labs and animal facilities which are desperately needed to support SEPRL's research on exotic and emerging poultry diseases. In addition, consolidation of avian disease research currently conducted at the Avian Disease and Oncology Laboratory in East Lansing, Michigan, within the new facility will promote the sharing of information and ideas as well as create a single center for avian disease expertise in an effort to enhance the services already being offered by these two laboratories. In fiscal year 2014, ARS requested \$155 million to fully fund the replacement of SEPRL; however, no funding was appropriated to ARS for this project. As such, no funds were available for obligation for this critical project in fiscal year 2014.

Mr. Bishop: Can you share with us the thinking behind the OGS Initiative, and should Congress not fully fund this initiative, what will happen to the projects which were included, particularly the SEPRL?

Response: The inclusion of the SEPRL replacement and modernization project within the Opportunity, Growth, and Security (OGS) Initiative highlights the need for this high priority research infrastructure investment within ARS. In addition to the proposed Biocontainment Laboratory and Consolidated Poultry Research Facility in Athens, Georgia, the OGS includes \$42.2 million for expanded investment in high priority research initiatives. In order to move forward with design and construction on the poultry facility and any expanded research initiatives, ARS will require funding from Congress.

Crop and Livestock Research

Mr. Bishop: I noticed that your FY15 budget request for crop protection research is \$180 million but only \$87 million for livestock protection research. Likewise, your budget request for crop production research is \$218 million compared to \$83 million for livestock production

research. What is the reason for this large disparity? Is crop production more important than livestock production? Are plant diseases more important than animal diseases? It is my understanding that many animal diseases which are known as zoonotic diseases can be transmitted between animals and humans and can therefore have major public health and economic implications.

Response: In FY 2015, the ARS budget request for crop production research is \$218 million. The U.S. produces an enormous variety of crops to meet food, fiber, and fuel needs. In addition to developing and transferring sound, science-based information and technologies to enable more productive and profitable food, fiber, fuel, and floral/ornamental crop production systems, production research includes safeguarding the nation's seed collections through the National Plant Germplasm System, providing associated genomic and bioinformatic crop databases, as well as genetic improvement and crop breeding for numerous specialty and minor crops, where little if any private sector support is available. These needs also include improving bee health and development of beneficial insects and microbes. A number of these needs and issues have no corresponding animal production component, which is one factor in the funding disparity between the crop and livestock production research programs.

The ARS budget request for FY 2015 crop protection research is \$180 million. Crop protection research includes development of control strategies to reduce losses caused by plant diseases and pests, but also includes the eradication and control of invasive nematodes, arthropods, and weeds; biological management of invasive species; and postharvest quarantine issues that can affect domestic and foreign trade. Crop protection research funding needs are large because the many crops and ornamentals grown in the U.S. are attacked by many different kinds of plant pathogens and pests at all stages of life from seed to the harvested product. ARS also provides extensive taxonomic information on invasive species that strengthen prevention techniques, aid in the detection/identification of invasive pests and pathogens, and increases control through management tactics that restore habitats and biological diversity.

By comparison, the ARS livestock protection and production research programs focus on a much smaller number of commodities when compared with the crop research programs. The commodities of primary focus in the livestock programs are beef and dairy cattle, pigs, sheep, chickens, trout and catfish, with some research being directed to other farm animal and wildlife species. In FY 2015, the ARS budget request includes \$87 million for animal protection research to safeguard the nation against the threat of foreign and domestic animal diseases. Research conducted in this program also supports APHIS and the development of vaccines for diseases and species that are not provided by the pharmaceutical industry. The ARS budget request for animal production research is \$83 million in FY 2015 for safeguarding and utilizing animal genetic resources, developing information to enhance management practices, developing novel and innovative technologies that improve animal production systems, thus enhancing the efficiency and productivity of our nation's livestock industries. The livestock protection and production programs include \$84 million for research on zoonotic animal diseases which could spread to humans such as Rift Valley Fever, Bovine Spongiform Encephalopathy, Avian Influenza, Bovine Tuberculosis and Brucellosis.

Another factor contributing to the discrepancy in funding among the crop and livestock programs is that a number of recent initiatives on high profile plant health issues, such as citrus greening, wheat stem rust, and

others, have resulted in increased funding for plant research. ARS is strongly committed to conducting the research needed to protect animal health and enhance livestock production and will continue to seek funds to enhance and expand these programs to safeguard the U.S. animal industries from the important problems that we face.

Agriculture and Food Research Initiative

Mr. Bishop: Are the eight major initiatives in your proposed \$325 million FY15 AFRI budget listed in the order of priority? If so, how did you prioritize these initiatives and much is allocated for each?

Response: The eight major initiatives in NIFA's proposed \$325 million FY15 AFRI budget are not listed in any order of priority. NIFA considers all eight initiatives to be equally important and of similarly high priority. Nevertheless, NIFA develops priorities for initiatives with input from numerous sources, including provisions in the Farm Bill, other Federal agencies and the community of stakeholders.

Mr. Bishop: I applaud you for including Initiative (8) "*food, agriculture, natural resource, and human sciences education and literacy initiative*" which is intended as a "*research and extension experiential learning initiative for undergraduates [to] provide opportunities for underrepresented students, including those from minority serving institutions*". This initiative does not seem to be in line with the competitive nature of the AFRI program.

Response: The new Food, Agriculture, Natural Resource, and Human Sciences Education and Literacy Initiative will add a third component to the NIFA Fellowships Request for Applications, which will solicit three project types including NIFA Undergraduate Fellowships; NIFA Pre-doctoral Fellowships; and NIFA Post-Doctoral Fellowships. The new NIFA Undergraduate Fellowships Program will be a competitive grants program, with applications being peer-reviewed and grants awarded based on merit in a manner similar to all other AFRI programs. This initiative will fund research- and extension-based experiential learning for undergraduates and will be open to all institutions, including HBCUs, with at least a four-year degree granting program in food, agriculture, natural resources and human sciences. Applicant institutions will be encouraged to partner with other limited research capacity institutions to provide opportunities for underrepresented students, including those from minority serving institutions.

Mr. Bishop: Could this initiative be incorporated into the Formula and Capacity Building Programs for which you are requesting \$774 million?

Response: The NIFA Undergraduate Fellows program will be a competitive grants program that is open to all educational institutions with 4-year degree granting programs in food, agriculture, natural resources and human sciences. Therefore, this program cannot be incorporated into Formula and Capacity Building Programs that are open only to the Land-Grant Colleges and Universities. Furthermore, even with the substantial funding support for Formula and Capacity Building Programs, U.S. colleges and universities are not meeting the future workforce needs in terms of individuals with secondary and postgraduate education in the food and agricultural sciences. The Food, Agriculture, Natural Resource, and Human Sciences Education and Literacy Initiative will contribute to reducing this gap between workforce needs and students educated food and agricultural sciences. The NIFA Undergraduate

Fellowships has the same focus as the NIFA Pre-doctoral Fellowships Grant Program, that is, developing technical and functional competence in the agriculture, forestry, and food sciences that are within NIFA's Challenge Areas and Foundational Program through well-developed and highly interactive mentoring and training activities. By linking the undergraduate and predoctoral fellowships, NIFA intends to help develop a pipeline of students for careers in food, agriculture, natural resources and human sciences that reflects the growing diversity of the population.

Mr. Bishop: If this is a competitive program, what criteria will be used to evaluate applications in order to ensure fairness and equal opportunity for underrepresented students and minority institutions, particularly Historically Black Colleges and Universities (HBCUs)?

Response: The Review criteria for the NIFA Undergraduate Fellowships will be similar to those used by the successful NIFA Graduate and Post-Graduate Fellowships program. The criteria will include scientific merit of the application for research, education, and/or extension; qualifications of project personnel, adequacy of facilities, and project management; and project relevance. However, the Request for Applications and the guidelines for reviewers will clearly indicate that the purpose of the program is to provide research and extension experiential learning opportunities for underrepresented students, including those from minority serving institutions. To encourage partnerships between the larger more successful agricultural research institutions and other smaller institutions serving underrepresented students, the program will require that at least 50 percent of the undergraduate fellows must come from outside the host institution or organization.

Science, Technology, Engineering, and Mathematics

Mr. Bishop: What is your timeline for consolidating STEM programs into the Department of Education and the National Science Foundation (NSF)? If this is designed to be a centrally-funded government program involving USDA, the Department of Education, and NSF, who will administer the program (as the lead institution) and how will funds be allocated?

Response: The Science, Technology, Engineering, and Mathematics (STEM) proposal in this year's Budget incorporates the congressional feedback we received last year, builds on the support in the FY 2014 Appropriations Act to do internal consolidations at some agencies, and supports the goals of the 5-Year Strategic Plan. The 2015 Budget continues to address STEM fragmentation, but adopts a different approach.

1. Agencies will focus on consolidating and eliminating duplication internally.

The Budget supports efforts made at Agencies to target funding to their most effective programs by providing additional funding for these undertakings. In FY 2015, the NIFA-Agriculture and Food Research Initiative proposal includes funding for a Food, Agriculture, Natural Resources and Human Science Education and Literacy initiative with the following two goals: 1) promoting research and extension experiential learning for undergraduates such that upon graduation they may enter the agriculture workforce with exceptional skills; and 2) preparing the next generation of scientists through fellowships, including doctoral and post-doctoral fellowships.

2. No funding is shifted between agencies.

Working in close coordination with the science mission agencies, the Department of Education, the National Science Foundation, and the Smithsonian will take the lead on STEM, but there will be no shifts in funding among agencies.

3. Strong focus on interagency collaboration.

Adjustments have been made to further facilitate the interagency collaboration currently underway as part of implementation of the 5-Year Strategic Plan. In certain cases, rather than eliminating a program, the Administration is proposing to restructure a program so it can be jointly administered or better coordinated with one of the lead agencies; in other cases, additional funding is provided to support collaborative work between agencies.

Food and Agriculture Resilience Program for Military Veterans
(FARM-Vets) Program

Mr. Bishop: I commend USDA's efforts to launch the Food and Agriculture Resilience Program for Military Veterans (FARM-Vets) Program to promote projects involving research, education, and extension activity for veterans. Fort Benning and Robins Air Force Base are both in the 2nd District in Georgia which I represent and I feel very strongly about giving our military veterans every opportunity to return to civilian life and find employment or become successful farmers or entrepreneurs. What criteria will be used to evaluate project proposals in order to ensure that applicants are given fair and equal opportunity during the application and review process?

Response: In drafting a FARM-Vets request for applications, NIFA will solicit research projects that support fundamental or applied research conducted by individual investigators, co-investigators within the same discipline, or multidisciplinary teams. Fundamental research means research that (i) increases knowledge or understanding of the fundamental aspects of how veterans benefit both economically and therapeutically via agricultural pursuits and has the potential for broad application and (ii) has an effect on agriculture, food, nutrition, or the environment. Applied research means research that includes expansion of the findings of fundamental research to uncover practical ways in which new knowledge can be advanced to benefit veterans, their families, and society. Multidisciplinary projects are those in which investigators from two or more disciplines collaborate closely to address a common problem. These collaborations, where appropriate, may integrate the biological, physical, chemical, or social sciences. Review criteria will include the scientific merit of the proposed activity; appropriateness of the proposed research for developing proof of concept of new and untested ideas including high risk research that leads to a significant change in the field; the applicant's previous experience and background along with the proposed activities; and relevance of the project to sustainable U.S. agriculture, the environment, human health and well-being, and rural communities. Applications from, and collaborations with, small to mid-sized institutions, minority-serving institutions, and/or Experimental Program to Stimulate Competitive Research states are strongly encouraged.

Behavioral Economics and Statistical Use of Administrative Data

Mr. Bishop: In your budget request of \$83.4 million, you are asking for \$3.5 million *"for improving policy effectiveness"* by focusing on *"the application of behavioral economics and the statistical use of administrative data to address critical information gaps that hinder program and policy effectiveness"*, e.g. *"understanding the decisions made by farmers to participate in risk management programs and the nutrition choices by consumers"*. Please explain this process to me in simple terms and why you need \$3.5 million for this research.

Response: The success of many USDA programs depends critically on good data, research, and program design. This \$3.5 million request is to enable research that uses more effective models and more detailed data than what has been previously available to yield research results that will lead to more effective outcomes for USDA programs and policies. ERS has developed the capacity to conduct experimental interventions in partnership with USDA program agencies to help these agencies reach their goals more effectively and to do so at lower cost. In addition, with a path-breaking generic clearance to conduct experiments from OMB, ERS has shared, and continues to share, knowledge about the experimental clearance process with other Federal agencies.

More specifically, a portion of the \$3.5 million will be used to develop behavioral interventions that increase the efficiency of existing programs. The remainder of the funds will be used for administrative data development, answering the President's call to make better use of the data we collect to improve programs and institute evidence-based decision making. The Initiative develops ERS' capacity to use, link, and apply administrative data for research and evidence-based program evaluation. Protecting the confidentiality and integrity of the administrative data systems is paramount, and requires investment in secure systems and data-linking protocols. In addition, investments are necessary to develop the technology necessary to secure the administrative data without undue burden on the program agencies.

Research using the tools of behavioral economics provides insights not realized using standard economic research methods. This is because behavioral economics considers how humans make choices in real life circumstances. Traditional economics assumes individuals always make rational choices to maximize their well-being. Often, people don't have this capability; they may not have enough information, they may not have time to carefully weigh the consequences of their choices, or they may follow impulses and habits that may not be fully consistent with their conscious desires. Behavioral economics tries to find patterns in these behaviors, frequently using experiments to further this understanding.

For example, mandating healthy foods in school cafeterias is a simple way of increasing the amount of healthy food offered to children. If, however, the goal of USDA is to increase the amount of healthy foods actually eaten by children, it is critical to make healthy foods attractive, and to test the effectiveness of efforts to make healthy foods attractive. ERS research helps USDA focus on that outcome by developing tools to measure food consumption and plate waste and by developing effective strategies to increase consumption of healthy foods. This research helps the USDA's Food and Nutrition Service (FNS) improve the effectiveness and efficiency of USDA's school meal programs by encouraging children to eat the healthy foods

provided under new, modernized school meal standards. Studies conducted in school cafeteria settings have identified low cost but effective ways to encourage consumption and decrease plate waste such as creating "healthy express" lines that make healthier items more prominent, attractive, and convenient to select. "Smarter lunchroom" strategies based on these findings are now being implemented in schools across the country.

This is just one example, of course. The success of many USDA programs depends on the behavioral choices of program participants, including participants in rural development, nutrition assistance, and conservation programs.

In fiscal year 2015, ERS will expand collaborative efforts with USDA program agency partners (such as Farm Services Agency and the Natural Resources Conservation Service (NRCS)) and university researchers to conduct an array of experiments that look at the determinants of participation in conservation and loan programs. This includes large field tests that test how "nudges" can be used to encourage greater participation in the Conservation Reserve Program. Other work will employ both laboratory experiments and samples of rural landowners and farmers to investigate how risk-taking preferences and the timing of payments affect willingness to adopt best management practices. Laboratory work in collaboration with academic researchers will provide a "test-bed" to examine how auction structure, such as the Environmental Benefits Index reverse auction used for the Conservation Reserve Program's general signup, can be improved upon to yield more cost effective enrollments.

ERS has begun, again in collaboration with FNS, a new behavioral economics research initiative that will investigate strategies to encourage healthier food purchases by Supplemental Nutrition Assistance Program (SNAP) participants and other low-income consumers. As a first step, ERS is planning a workshop, to be held in the summer of 2014, which will bring together program and policy stakeholders, representatives of the food retail sector, and research leaders to identify feasible effective strategies and formulate a research agenda. This workshop is a partnership activity led by the National Collaborative on Childhood Obesity Research, whose partners include USDA, the National Institutes of Health, the Centers for Disease Control and Prevention, and the Robert Wood Johnson Foundation. Fiscal year 2015 funding will also be used to conduct research based on the identified research agenda identified through the workshop and through consumer behavior research conducted by ERS.

The second area that this funding will support is the expanded use of administrative data. This data, gathered by program agencies in the course of implementing a program, is a highly reliable and relatively low-cost source of data on the amount of benefits provided to each participant and the dynamics of program participation. Examples include contracts for Conservation Reserve Program participants, Risk Management Agency policy data, and individual uses of SNAP benefits. These data are often the only source of information on exactly how individuals participate in programs. Even so, the data are underutilized for program and policy evaluation in part because they frequently lack detail on participation in other government programs and on socio-economic characteristics. Linking these data with other administrative or survey data (while protecting confidentiality) and using them for rigorous statistical research would both increase accuracy in analysis and avoid the substantial costs of collecting similar data via statistical surveys.

Census Planning and Design

Mr. Bishop: Your FY15 budget request of \$179 million includes \$48 million (26.8%) "to begin the planning and design of the 2017 Census of Agriculture." What is your justification for this budget request that is mainly for planning and design? Does your \$179 million budget request include the \$3.5 million for the Census of Horticultural Specialties? Is this census more important than a census for invasive plant species?

Response: Included in the \$48 million requested for the Census of Agriculture is \$3.5 million for Census of Horticultural Specialties. This Special Study collects information to provide a comprehensive and detailed picture of the horticultural sector of the U.S. economy. It is the only source of detailed production and sales data for floriculture, nursery and specialty crops. The results from the 2009 Census of Horticultural Specialties showed that the value of sales accounted for \$11.7 billion, an increase of 10.3 percent from the value of sales in 1998. This Census Special Study is scheduled to be mailed in December, 2014.

NASS has not received requests from constituents to conduct a census of invasive plant species. The results of the Census of Horticultural Specialties are used by industry, government, academia and producers, aiding in the development of sound programs and policies, research, and market analysis and business planning. The results also help the nation value the horticulture industry by supplying timely, relevant information to help improve production methods, marketing tactics and plans for the future of the industry.

The \$48 million includes \$1.2 million to conduct the Current Agriculture Industrial Reports and \$2.5 million to complete the final phase and publish the 2014 Census Special Study on land ownership.

The FY 2015 budget request of \$179 million includes \$48 million for planning and designing the 2017 Census of Agriculture. NASS necessarily works continually to address improvements in census activities, list building, and methods to reach the greatest number of farmers to obtain the latest data. The planning process for the Quinquennial Census of Agriculture Program is central to the whole Census process and in FY 2015 the ongoing work to improve the list building key census activities include but are not limited to:

- Final release of supplemental census products.
- Begin developing the 2017 Census Mail List.
- Evaluation of all processes used to produce the census of agriculture including data collection, data processing, data editing, data analysis, data adjustments, and data summarization.
- Determine and test new content items for the 2017 Census of Agriculture questionnaire.
- Enhance online data reporting instrument.

STATUS OF NATIONAL OPERATIONS CENTER

Mr. Bishop: What is the status of the National Operations Center that centralizes data collection and service?

Response: Since its inception, the National Operations Division (NOD) has focused on hiring and training call center staff. We currently employ 220 telephone interviewers and enumerator coaches. We have completed more than 2.5 million outbound calls and over 75 surveys. We have conducted over 230,000 interviews with farmers and ranchers throughout the country; logging more than 100,000 hours of data collection. Our Call Center has successfully managed more than 3 million minutes of in-bound calls from operators who received the 2012 Census of Agriculture and other NASS surveys.

We are building telephone enumerator training tools for four other Data Collection Centers, at the regional sites, that support NASS's Field Offices. This ensures consistent training of staff that collect our data. We are also working to provide training tools for NASS's field enumerator staff. Our Enumerative Survey Development Group continues to support and develop new telephone data collection tools. We have built approximately 40 new data collection instruments in the last year.

The NOD has also assumed full responsibility for the maintenance of survey sampling frame. The frames maintenance staff have processed more than 574,000 requests for updates to NASS's sampling frames in the last 12 months. We have completed the activities associated with our classification process of selecting the samples for all surveys in all states. Our staff also completed the Census of Agriculture mail list build of over 3 million records and completed more than 151,000 post-Census name and address updates and over 14 million rows of data were updated.

For the first time since taking over the Census of Agriculture in 1997, NASS set up a Census Edit Unit (CEU) at the NOD in St. Louis. The CEU was made up of about 80 recent or soon to be college graduates. These trained analysts were dedicated to editing census responses and provided a more consistent approach to editing data; therefore improving data quality.

Additionally, during the last 12 months we have edited, performed data entry, and created an electronic image for nearly 423,000 paper forms in our processing unit for a total of nearly 998,000 forms since December of 2011. We also processed samples for three objective yield surveys last year. Samples of cotton, wheat, corn and soybeans were counted and weighed for all 21 states in the Objective Yield Survey program. This was the first time one location has processed all samples, which were previously completed in six labs across the US. The NOD is also responsible for ordering the objective yield survey materials, thereby allowing the agency to purchase larger quantities and realizing cost savings.

We recently opened the National Print Mail Center at the NOD. We have consolidated the printing and mailing formerly done in four locations. The NOD is currently responsible for more than 60% of the agencies printing and mailing needs.

Consolidation of functions in one location will allow the procurement of state of the art equipment, reduce staffing, and increase efficiency in printing and mailing operations for NASS. The first production line was operational in October 2013 and a second production line was in place during January 2014. Work from four other print mail centers were consolidated in the new facility at the National Operations Division.

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